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FACTORIES INQUIRY COMMISSION.

SUPPLEMENTARY REPORT

OF

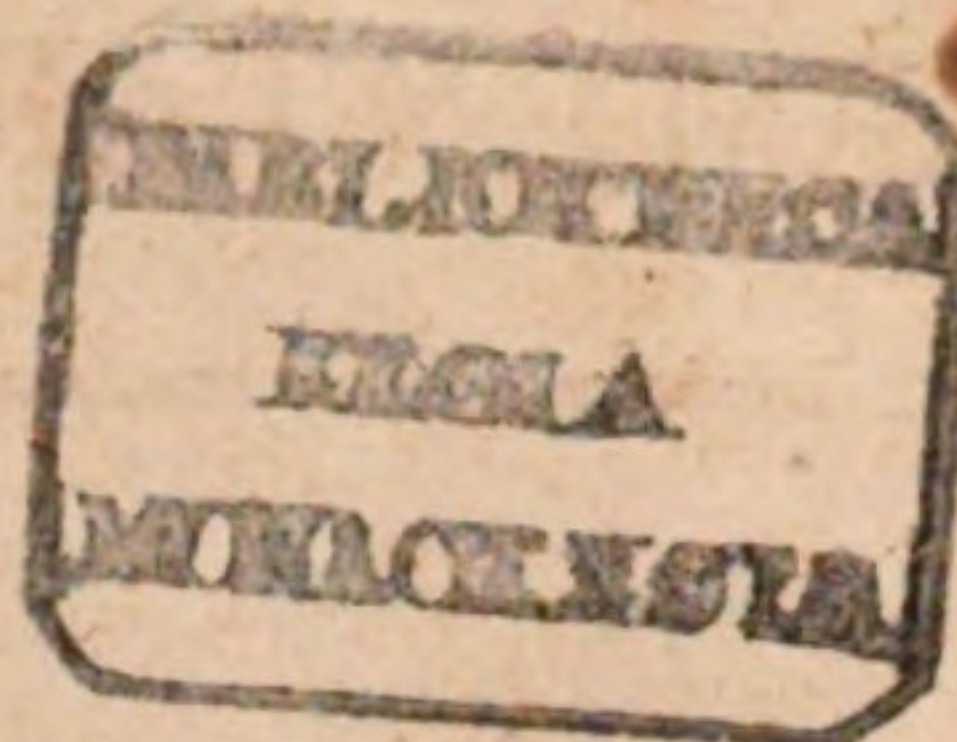
THE CENTRAL BOARD

OF

HIS MAJESTY'S COMMISSIONERS appointed to collect Information
in the Manufacturing Districts, as to the EMPLOYMENT OF
CHILDREN IN FACTORIES, and as to the Propriety and Means
of CURTAILING the HOURS of their LABOUR.

PART I.

Ordered, by The House of Commons, to be Printed,
25 March 1834.



SUPPLEMENTARY REPORT.

IN addition to the Documents already laid before His Majesty's Principal Secretary of State for the Home Department, we have now further to submit the results obtained from the Tabular Queries circulated throughout the manufacturing districts, which have been calculated by Dr. Mitchell the Actuary, and which are detailed in his Report to the Central Board; various papers chiefly statistical, for the most part Supplementary to the Reports of the several District Commissioners; together with the Answers received to the printed Queries addressed generally to the Manufacturers of the Kingdom.* The information relative to the general state of the manufacturing population derived from these different sources will be found to be of great extent and value. We beg to refer more especially to the Answers obtained to the printed Queries. It should be borne in mind that those Queries were framed at the outset of the Commission, when no specific plan for the regulation of factory labour, excepting that of Lord Ashley's Bill, had presented itself to the minds of the Commissioners; in consequence of which the information does not bear so directly and fully on the practicability and expediency of the plan suggested by the Central Board, and subsequently adopted by the legislature, as might have been the case had that plan been in contemplation at the time the Queries were framed. Nevertheless various opinions and suggestions stated incidentally will be found to bear directly on these points, and deserve particular attention.

It appears that the manufacturers, with very few exceptions, do not consider the actual hours of work to be excessive or prejudicial to the health or well-being of the children. It could not, therefore, be expected of them that they should originate any scheme which should curtail those hours, if, from the nature of the work, such curtailment could not be effected without immediate trouble, inconvenience and expense. Accordingly, the general tenor of the opinions of the manufacturers is adverse to any change; and it is only by a reference to their incidental admissions or suggestions, as contained in some of these Answers, that the practicability and expediency of a separation of infant from adult labour, in point of duration, may be inferred or collected. But the admissions and suggestions to that effect, proceeding as they do from manufacturers who possess extensive practical experience, and whose immediate interest is rather opposed than favourable to the change in question, must be considered as outweighing the objections which, where they do not simply assert absolute impracticability, resolve themselves into considerations of inconvenience and expense to the manufacturer, and of reduced earnings for the younger children of the operatives—objections which, in our First Report,

* Reports are also added from Dr. Hawkins and Mr. Tufnell.

we noticed, and, with the exception of the alleged impracticability, admitted, whilst we considered them as overbalanced by the great benefit held out for the children, and eventually to the manufacturing population, and to the manufacturers themselves, by the adoption of the proposed plan.

The Answers to the printed Queries 31 and 32 from the Central Board may appear, if looked at without reference to the precise terms of the questions, to convey a great preponderance of opinions against the plan proposed by us of employing more than one set of children during the working hours of persons above the age of childhood. But it will be found that these questions, viz.—

31. "What is the objection, if any, where extra hours are required, to have relays, or fresh sets of children, or persons under twenty-one years, by whom those sets which have worked within the ordinary hours may be relieved?"
32. "Has a system of relays, or change of hands in the employment of children, when extra hours are required, been tried? and if so, how has it answered? If it has not been tried, why not?"

have no bearing, or none but a very remote one, upon the plan proposed for the separation of the hours of infant labour from those of young persons and adults. The relays referred to in these queries evidently include all persons under twenty-one, to be employed only when extra hours were required. Accordingly the great majority of the answers to these queries proceed upon this which is the obvious and proper construction of them. Thus Mr. Archibald Buchanan, of the Catrine Works, whose opinions on all practical points connected with the cotton manufactory deserve the greatest attention, objects to relays in the following written answers from him, p. 25:—

"A. 31.—The objections to this, in our opinion, are very great: first, because a double set of hands could not be collected and sufficiently trained for a series of years; second, supposing a relay of hands under twenty-one years of age could be got, the adults could not be supposed to work above fourteen hours in the day, allowing the least possible time for meals and refreshments, which would only give seven hours work to those under twenty-one, and the produce in that time could not afford more than half the present wages to the younger hands, which would be found totally inadequate to afford the means of support and comforts which that class now enjoy; and, third, since all our people are paid by the piece, we do not see a possibility of distinguishing the produce belonging to each, so as to pay for their individual exertions.

"A. 32.—A change of hands for extra hours has never been practised by us, because, in our situation, we deemed it not only unprofitable but impracticable."

And as a strong presumption that the impracticability asserted, of getting sufficient numbers for a double set, does not apply to hands of the ages restricted by the Act to forty-eight hours in the week, it may be observed that Mr. Buchanan, with reference to Query 11,—

"Does the nature of your work require the employment of children under twelve years of age?"

answers,

"The nature of our work does not necessarily require children under twelve years of age, but it is of the greatest importance to the children themselves and their parents, because in the period from nine to twelve they are trained to the business when they could do little else, which fits them for the more lucrative employments as their strength and fitness are developed."

Now if the manufacturers can, as in this instance, and as appears to be the case by the answers to Query 11 in by far the greater number of instances, altogether dispense with the employment of children under twelve years of age, there can be no objection, beyond the consideration of a small difference of wages, on the part of manufacturers so situated, to the restriction as to age and hours of work imposed by the recent Act. This restriction does not in
its

its immediate application extend beyond eleven years complete, and will not reach children of twelve years complete till March 1835; nor those of thirteen years, being the utmost age to which the limits of forty-eight hours work in the week attach, till March 1836. The immediate restriction therefore applies only to hands that are actually one year below the age at which Mr. Buchanan and the great majority of other manufacturers state that children are necessary for the processes of the manufacture. And another twelvemonth of preparation is allowed to the manufacturers for the second stage of the restriction; viz. that which applies to children of twelve years, being the lowest age at which, according to those statements, they become essential. If, therefore, those manufacturers, being by far the major part, to whom these ages are not essential, dismiss or reduce the number of them in their employ, there can be no ground for supposing that there will not exist sufficient numbers for those to whom the restricted ages are essential. And if applied to populous places, the assertion of impracticability of obtaining sufficient numbers must proceed on the supposition that all the mills of the neighbourhood will require double sets; whereas it will appear, by a reference to the answers, to be to a small portion only of the whole number of mills that the restricted ages, those at least up to twelve years complete, can be of importance.

In the factories that are isolated, and require hands under eleven, there may be more difficulty in procuring them, if there does not already happen to be a surplus of that age applicable to making up double sets. But in these cases an arrangement may be made, such as has been suggested by Mr. Power, (First Report, North-eastern District, p. 77,) by which a set and a half, or one third of fresh hands daily, of the restricted ages, may answer the purpose of keeping up with the unrestricted hands for twelve hours work. An arrangement to the same effect was submitted by Mr. Houldsworth, of Glasgow, to the consideration of the deputation in London from the manufacturers of Lancashire and Scotland, while the Bill was in progress through the House of Commons; and, having been approved of, was the occasion of the latitude of nine hours being given, instead of eight, for the purpose of allowing the change of hands taking place at meal-times; the limit of forty-eight hours in the week being still preserved. With this additional facility, it is not to be readily believed, whatever the representations may be, that any mill, however remotely situated, having moreover had such abundant time for preparation, can experience any difficulty beyond what may resolve itself into some inconvenience and additional, although inconsiderable, expence, but nothing like impracticability.

Although the majority of the answers to the Queries 31 and 32, proceeding on the supposition of their applying to all hands under twenty-one, express objections on the score of the insufficiency of the reduced wages for the reduced work to procure the requisite number of hands, as also on the score of inconvenience from divided responsibility in the care of the machinery, and from want of uniformity of the work incidental upon a change of hands, there is no inconsiderable number of the answers which, in general terms, state that there is no objection to relays, even in that sense. It is, however, in some of these cases either stated or to be inferred, that extra hours, even to night-work, are contemplated.

At the same time, among the answers to these queries are some which make a distinction between children properly so called, and young persons under twenty-one; and in all these instances, the parties giving the answers consider relays, or at any rate a separation of hours of work of the children from those of young persons above the age of childhood, unobjectionable, if not desirable.

Thus Mr. William Hackney, on the part of his firm of Chalmers and Hackney, of Dundee, flax spinner, Northern District, p. 95:—

“ If those only under fourteen years of age were to be considered as children, there would be little objection to having relays of them; the principal one would be, that their wages divided betwixt two would be insufficient to support them both; but an arrangement might be made to reduce the hours of that class an hour per diem by allowing them one half hour in the morning and half an hour at night; but if all persons under twenty-one years of age are to be rated as children, the objection to relays of that description are various. In a place like Dundee, where so many are employed under twenty-one, it would be long before a sufficient number of hands could be got, and although they were, they could not be paid half wages; if they are employed, the employer must support them, and even for full work the hands have not much more than is necessary for that purpose.” *

Mr. H. Smith, for Mr. J. W. Morton, flax spinner, of Arbroath, (Northern District, p. 83.) says,—

“ I think the Bill should apply to children below a certain age only, say twelve, limiting their work to six hours per day. In that case a change of young hands could easily be obtained; it would bring them up to habits of industry, and be beneficial to their parents, without hurting their health or preventing their education.”

Mr. H. Monteith, Blantyre Works, Lanark, cotton spinning, p. 143:—

“ We do not think relays of workers would do well; all workers are to a certain extent responsible for their own machinery: they have an interest in keeping it clean and in good order; but were fresh sets of hands employed, and the work not well done, they would blame the previous set, and keep the manager in a constant broil with his workers; besides, it would lead to disputes, for if one worker wished to injure or perhaps ruin another, the best opportunity he could

* The following answers from the same parties were transmitted in a letter from Mr. Stuart, dated 14th May 1833; and having been accidentally omitted in our First Report, are now inserted in the Appendix from Mr. Stuart, p. 5:—

“ What would be the objection (if any) to restricting the employment of children between the ages of nine and thirteen to six or eight hours in the day, and thus to work in two sets, according as the whole day's work might extend to twelve or sixteen hours (it is suggested that such a change of sets might be made at the hour of dinner-time, when the machinery is already stopped) ?

“ Would a change of hands, so made, entail any waste or inferiority of work ?

“ If so, describe the nature of such waste or inferiority.

“ *Answer.*—The employment of two sets of hands under thirteen years of age supposes the possibility of working the machinery sixteen hours a day; this is nearly impossible; it would be much too long to work hands of any age, and they could not continue at it; and even if it were attempted, the injury arising therefrom would be much greater to those above thirteen years of age than any benefit which would arise from the reduced hours to those below that age; and if the hours are continued at twelve and a half, as at present, or reduced to twelve, the wages of those under thirteen years (which are from 2s. 9d. to 3s. 9d. per week) would be insufficient for the support of both sets, and they would not get higher wages, for the employer would prefer to pay even additional wages to those above *thirteen* than to have two sets. There would be no check on those under thirteen *only* being worked six hours, for they would go half the day to one work and half the day to another. The pilfering of the material would be also much greater; and this is carried to a great height in Dundee, from the facility of disposing of it. There would be no objection on the part of the masters if the employment of children under twelve years of age were prohibited entirely, though it would operate as a hardship on their parents; but were this prohibition extended to those of thirteen years of age, it would be productive of much misery to that class, who are unable to keep their children idle until they attain that age.

“ There would be no waste or inferiority of work arising from a change of hands.”

could have would be to get working at his machine, when he could do it with impunity. In works situated like ours in the country it would be quite impossible to obtain a full double set of children; were all children under twelve years of age prohibited from working more than eight hours, this we think we could accomplish, but were the age raised to fourteen it would be impracticable."

Messrs. John and William Clark, Glasgow, cotton manufacturers, p. 147:—

"We know no objection to relays. We consider that the best protection to young persons would be to prevent them from working entirely under (say) twelve years. Between that age and fifteen years to be allowed to work only six or seven hours, viz. half time of what adults would if unfettered by legislative enactment, so that we would be forced to have two sets of persons betwixt twelve and fifteen years of age. After fifteen years they should be free, except for night-work. Many of our best hands, and who make the largest wages, are not above fifteen years of age."

And further, in answer to Query 32, the same firm adds:—

"Relays would do well; but no young person, any more than adults, will take any less than full work. But if restricted by law to six or seven hours a day, we could then by relays go with adults whatever hours were found proper; but, as at present, we are obliged to reduce the hours of adults to the standard by law for young persons."

Mr. James Smith, manager of Deanston cotton works, Perth, p. 168:—

"As children under twelve years of age have generally been found to enjoy health and cheerfulness, relays have not been thought of; but there can be no doubt that working by such relays might be accomplished, although it is probable that the individuals so employed would have less money for their labour, and which would press hard upon themselves, and their families are much aided in their living and education by the employment of the members above nine and under fourteen years of age. In many cases widows with their children are by this means saved from starvation, for the pittance of parochial relief allowed in Scotland is very inadequate to their support."

Mr. Charles Dunlop, of Neilston, Renfrewshire, cotton spinner, p. 190, states:—

"I would suggest that the law should be made as simple as possible, that it should merely regulate the hours of work for children under fourteen years of age, and the earliest age at which children should be employed. The present penalties are sufficiently high, if a public prosecutor were appointed to see the law carried into effect."

Mr. John Graham, of Neilson, Renfrewshire, cotton spinner, p. 192:—

"The Act at present in force having been acted up to in all essential matters at this work, and as far as I know in similar works in this neighbourhood, I do not think that further provisions are required to secure obedience to it in this neighbourhood; but I think that the provisions of any Act would be best enforced by rendering it imperative on the sheriff or chief magistrate of each district to annually perambulate the works situated therein, to investigate, by an examination of workers and otherwise, as to the obedience given to the Act, with power summarily to inflict the present or an increased scale of penalties, such penalties to be increased on repetition of offence; the power of voluntary information against offenders, as by the present Act, to be continued."

"My opinion is, that any alteration to be effected by a new act should be limited to children above nine and under twelve years of age, who might be allowed to be employed each day a number of hours not exceeding two thirds of the number of hours allowed under the act at present in force; and no further alteration seems to be required, excepting as stated in A. 78."

In the Lancashire District, Mr. Randal Hibbert, Godley, Cheshire, cotton-spinner, p. 7. states:—

"To children, say under thirteen, there can be no great objection on the part of the manufacturers to such relays; but as hands above twenty-one could be obtained at less wages than two sets under twenty-one, the latter would be turned out of work, or be obliged to work at very reduced wages."

Mr. Thomas Robinson, Stockport, cotton-spinner, p. 82:—

“ I should say, let children from ten to twelve years of age work six hours per day; from twelve years upwards, twelve hours per day; one hour and a half for meals.”

Mr. John Johnson, St. Peter, Derby, bobbin-lace manufacturer, p. 108:—

“ By making the law strictly a protection for infants, and not an interference with those persons who from their age are free agents, (by free agents, I mean all persons above the age of fourteen years,) every humane object would be answered, and the co-operation of the manufacturers would be also secured.”

Mr. Paul Chappe, Manchester, spinning and thread making, p. 192:—

“ I should think it advantageous for the children's health to have two sets, to work six hours each.

“ I have never tried it, because it never was demanded from me.”

Messrs. H. and E. Ashworth, of Turton, near Bolton, give the following answer to Query 11, p. 278:—

“ The nature of our work does not require the employment of children under twelve years of age. Children being legally admissible into mills when nine years of age, if we refused then to admit them, those of our workpeople who had such children would leave our service, and obtain work where they would be allowed to employ their children. Children become more expert when introduced into mills below twelve years of age. There are many families, particularly those of widows, would suffer, if the children were not permitted to work before twelve years of age; we think that all children might be allowed to work in mills for six hours a day, from nine to twelve years of age, without any injurious effect.”

Mr. Watts Wrigley of Halifax, spinning and twisting waste silk, p. 34, states:—

“ For children of twelve years of age there can be no objection to having relays; but for older hands it would not be practicable, on account of it not being worth their while to work for that proportion of wages.”

In the Western District, Mr. Rice of Painswick, Gloucestershire, woollen manufacturer, p. 19:—

“ We have no objection to the restriction of children from work until they are nine years of age, provided the legislature will adopt means for the maintenance and education of such children; and a limitation of hours for those from nine to fourteen years of age, and after fourteen years of age to be allowed to work to the advantage of themselves, and at the convenience of their employers.”

Mr. William Fluck of Standish, woollen manufacturer, p. 22:—

“ We should have no objection to a limitation of hours, say from nine to fourteen years of age, provided the legislature will adopt means for the maintenance and education of such children, which otherwise would become burdensome to their parents and parishes.”

In our First Report, we quoted the evidence of Mr. Marshall, by which it appeared that an experiment was in progress at his factory in Leeds, of employing children at half time and half wages in the mill, and of making them pass some hours of each day in school. The following answers from the firm of Messrs. Marshall and Co. to Queries 10 and 11 will give the particulars of this experiment more fully:—

“ None are employed under eleven years of age at full work. Some have previously worked at other manufactories, chiefly flax and woollen mills. We have lately, as an experiment, employed a small number, about twenty children, from nine to eleven years of age, at half time, for which they receive half wages, and are required to attend the mill-school the other half of the day, for which they pay half the usual charge. By this plan the children are sooner able to earn something towards their own support, which is an important relief to families in poor circumstances. The attendance at school, besides securing a proper education, prevents the possibility

possibility of the children being employed the whole day at different mills. This system offers no additional advantage to the manufacturer; but if in its general adoption the provision to prevent the children from being employed the whole day at different mills could be rendered effective, it would, we think, be very beneficial to the workpeople.

“Children of eleven or twelve years of age are preferred by us to those of nine or ten. They do more work and require less superintendence than younger children, provided they have been previously brought up in habits of order and obedience; otherwise they make worse servants than those who begin to work at nine or ten years of age.”

The nature and object of this experiment, as here set forth, are precisely those which are proposed with reference to children of those ages by the provisions of the recent Act.

The following are answers to No. 21 of the printed queries issued in the North-eastern District, viz.—

Messrs. J. Anderton and Co. of Bradford, spinners of worsted linen, p.100:—

“We have never employed more than one set of children. We are of opinion that children under twelve years of age ought not to work more than six hours per day. We consider it to take two years before a child is competent to manage a side; and it is our opinion, if children were only worked half the time during their learning to piece, they would make better and be more useful hands.”

Messrs. Firth and Co. of Langfield, Yorkshire, cotton-spinners, p. 229:—

“We do not object to the hours of labour for children under fourteen years of age being limited to eight or ten hours; but we think that, after they arrive at that age, they ought to be left at liberty, in this business, the same as in all others.”

Mr. James Holdforth, Leeds, Yorkshire, cotton-spinner, p. 244:—

“I don’t see any objection to employing two sets of children, suppose from ten to twelve years, or perhaps fourteen years, provided they can be procured, and at a wage proportionate to their time; this would afford them time for recreation and learning, and would enable the adult hands to make the most of their time.”

Messrs. G. Binns and Sons, silk-spinners, Ovenden, Yorkshire, p. 282, state:—

“Have never employed more than one set of children; but, in the contemplated act of parliament for the regulation of children’s labour, we beg earnestly to recommend it may contain a clause allowing two sets of children to be worked in any factory on one day; and we think that seven hours would not be too great to allow to each set of children. A clause of this kind, we think, would operate to check some of the evils which may fairly be anticipated to the general interests of the country which a too restrictive act might produce.”

Also Mr. Michael Robinson of West House Factory, flax-spinning, p. 333:—

“We have never employed more than one set of children; but have no objection to employ two sets, which might reduce the hours of labour of children under a certain age, (we should say twelve years,) to six or seven hours per day, and this would answer every purpose the present bill professes—viz. that of protecting children from over-working.”

And further, from the same, in answer to Query 27:—

“We see no need of any interference by act of parliament for the regulation of factory labour, further than the protection of children under twelve years of age, which certainly would be an act of greater humanity than many parents exercise towards their children. We have no doubt, if children be injured by the factory labour, it is while they are under twelve years of age, by confinement, without that free exercise they require.”

These opinions, in some instances recommending, and in others admitting the perfect practicability of, a separation of the working hours of children, properly so called, from those above the age of childhood, are the more

important, inasmuch as the measure suggested is one that could not fail of being productive of inconvenience in the first instance, however easily it might eventually work. A small number, therefore, of opinions on the part of mill-owners favourable to the plan must be considered as greatly outweighing the objections of a large majority who must naturally be opposed to such change. But the opinions which we have quoted, together with several others answering in more general terms in the affirmative to Queries 31 and 32, must be regarded under such circumstances as unexpectedly numerous, and as constituting such a weight of practical authority as is fully sufficient to justify our having recommended the separation in question, accompanied by conditions calculated to make it effectual.

On the subject of such separation we have further to observe, that Mr. Tufnell, who, in his report from Lancashire, argues against any interference whatever with factory labour, gives it as his opinion, that

“ If, owing to foreign competition and other causes, our manufacturers cannot work their mills a shorter time than at present, and this appears to be indisputably the case, the only way of lessening the labour of children is, to enforce the employment of different sets of hands. It seems inconsistent to wish for the enactment of a factory bill, and at the same time to object to the system of relays.” P. 34.

Among the answers which we have quoted, it may be observed, that only one, viz. that of Messrs. Marshall and Co., refers to a limitation of age so low as eleven, while there are a few that go as high as fourteen, and one, that of Messrs. G. & W. Clark, extends to fifteen; but the majority refer to the age of twelve as that up to which the system of relays is clearly practicable and desirable. Now we cannot, in justice to our plan, as it has been embodied in the recent Act, too strongly call attention to the circumstance, that in pointing out the age of thirteen years complete as that to which, consistently with the only principle which we could recognize, the interference of the legislature might extend, we distinctly admitted in our First Report the difficulty, not to say impracticability, “ as regarding the manufacturer on the one hand, and the distress it might entail “ on the working classes on the other,” of immediately enforcing a restriction to eight hours work for hands of that age. Considering, therefore, that a measure involving so great a change of existing habits should be guarded with every possible precaution in the time as well as the mode of its application, we proposed that an ample interval should be allowed for preparation. Accordingly, we suggested that the limitation should be applied in the first instance, and that not till six months after the passing of the act, to children up to the commencement of their twelfth year, extending the restriction by stages or intervals of some length to children under the commencement of their thirteenth and fourteenth years respectively. “ *By the application,*” we then added, “ *of this limitation in the first instance to children under twelve, “ the most urgent part of the evil proposed to be remedied is met; none of “ the hands of twelve and thirteen will be displaced or reduced so as to occa- “ sion distress to their families, and time will be given for judging of the experi- “ ment as far as it goes; for in so great a change it is desirable that the measure “ should, in the first instance, be considered as merely tentative.*” * Now, as by the provisions of the Act, the restriction to forty-eight hours in the week

* First Report, p. 57.

will not apply to children *above twelve years complete* till the 1st March 1836, we are justified in confining our argument to the practicability and expediency of a limitation up to that age only ; because, after the length of time which will elapse before the restriction will apply to hands of thirteen years of age, the fullest experience will have been obtained of the working of the plan. And if it should then be found that the additional year is likely to entail a great degree of inconvenience, it will be open for the legislature to apply a remedy, either by stopping the restriction to forty-eight hours in the week at twelve years complete, or, what we would venture to suggest as the preferable alternative, by reducing the age of prohibition to eight years. Indeed not only as an alternative eventually and in compensation for the restriction up to the completion of the thirteenth year should we consider a reduction by one year of the prohibited age advisable, but we would submit whether, if in the progress of the working of the measure any amendment of the Act not affecting the principle of separation of infant from adult labour were found necessary, a clause might not be introduced admitting children of eight years of age to work in factories, according to the suggestion offered by us in our First Report : —

“ In order to give increased facility for getting a sufficient number to constitute double sets under twelve, there would not in our opinion be any great objection to reduce below nine years the age of absolute prohibition ; because the hours of work being limited to six or eight, time being thus afforded for school and recreation, the occupation moreover not being laborious, it is not clear that children at the age of eight years might not harmlessly, at least, to themselves, and to the convenience and relief of their parents, be admitted into the factories.” *

We have been induced to dwell the more particularly on the point relative to the stages by which the restriction comes into operation, because the objections urged against the measure, and the doubts expressed as to its working, have, in a great many if not in most instances, proceeded on the assumption that the restriction to double sets was at once to include all children up to the completion of their thirteenth years ; whereas until March 1835 it will include those only who are *eleven* years complete ; and as before observed, those only who are twelve years complete will be included till the 1st March 1836.

In addition to the authorities from among the manufacturers in favour of working children for shorter hours than adults, is the following from among the operatives, extracted from evidence given by Mr. Thomas Ashton, of Hyde, before the Central Board on the 3d May 1833, and accidentally omitted in the First Report :—

“ The workmen in my employment, just before I came up to town, met and considered the question of factory regulations, and proposed, as the result of their deliberations, that children under twelve years of age should be employed only six hours, and should work in two sets.

“ Was the meeting of your workmen voluntary, or at your own suggestion?—I asked the overlooker to call the men together, (as I was going to London with respect to the factory regulations,) and ask them what their wishes were ; and they communicated to me the results, which were, that if any legislative provision was necessary, that the time of work should be restricted to eleven hours per day, allowing twelve days holidays, but they would prefer twelve hours of five days, and nine hours on the Saturday, for fifty weeks. They agreed unanimously to this

* First Report, p.58.

proposition. They also agreed unanimously in recommending that all persons above twelve years of age should work the same time.

“ And do you as a master concur in these propositions ?—If we are to have a bill, I think this arrangement preferable to any thing I have seen.

“ You then apprehend no mischief in the markets from these limitations ?—I scarcely like to answer for the whole trade, but for my own part I should be perfectly satisfied with this bill ; it is in fact only a modification of Sir John Hobhouse's Bill.”

That this should be the single instance of any body of workmen who, when called upon to consider of factory regulations, have proposed a limitation of the labour of children under twelve years of age, is not a little remarkable ; because, for the same reason that induces the artisans to endeavour to force on their employers a rigorous limitation of the number of apprentices, it might be supposed to occur to the operatives in factories as their obvious interest to have a check put upon the constantly increasing competition, which those of them who are above the age of childhood are experiencing from the tendency to a preferable employment of infant labour, at comparatively reduced wages. It is true that some of the parents, whose families consist of a larger proportion of children of the restricted than of the unrestricted ages, and who are willing to derive a part of their income from the premature and excessive labour of their children, may feel an interest in continuing the present practice ; although we beg to refer to Dr. Mitchell's Report for satisfactory evidence of “ the small amount of wages of very young children employed,” which, from the Tables calculated by him, will be seen to be, in the case of some children of six years of age, as low as 6*d.* a week ; and in the case of children as old as ten years, will be seen to average, in some districts, under 2*s.* a week ; and in the other districts, from 2*s.* to 3*s.* a week ; affording an advantage to the parent trivial indeed compared with the injury inflicted on the child. Besides parents, such of the operative spinners and weavers as work by the piece, and pay the infant hands out of their own earnings, have also a pecuniary interest in the continuance of the system of working children the full time of adults. But, with these exceptions, which constitute a small proportion of the whole body, the interests of the great majority of the operatives above the age of childhood would clearly be promoted by such a limitation as that proposed by Mr. Ashton's workmen. The demand for infant hands, on account of their great cheapness, is such that, according to the whole of the evidence, there is employment for all that are readily to be found. If these were reduced to half time, one half of their number would require to be replaced by hands above the restricted age ; and the same amount, at least, of wages that might be saved from the reduced hours of the restricted hands would be distributed among the unrestricted. But probably the amount of wages to the unrestricted hands would be somewhat greater, in consequence of the increased demand for them thus created. It is indeed the apprehension of increased wages that is, as might naturally be supposed, at the bottom of a great deal of the opposition to the restriction of the labour of children on the part of the masters, as also of the operative spinners.

Mr. H. Houldsworth, of Manchester, p. 220, states, in answer to the printed Query 11 :—

“ In spinning fine yarns, a certain proportion of children, from twelve to ten years of age, are advantageous to our spinners, being cheaper than older hands, and sufficiently effective : one hundred and eighty-four such children, whose wages average 2*s.* 11½*d.* per week, are employed in our mills. If children of twelve to fourteen years of age were substituted, the average of *their* weekly wages being 4*s.* 5*d.*, the extra expence would be 700*l.* per annum.”

The

The restriction of the 184 children here mentioned to forty-eight hours in the week would, according as these were worked in halves or thirds of sets, cause a vacuum requiring one half or one third of the unrestricted ages. If these were, as they are here stated to be, from twelve to fourteen years of age, at the rate of wages set down, the extra expence would be, for a half set £350, and for one third of the number £233. 6. 3. It is probable, however, that the restricted hands would get wages somewhat beyond the proportion of the reduction of hours, and that, from the increased demand for the unrestricted hands, some increase of wages would be required for them also. This extra expence would fall wholly on the manufacturer, in cases where all the hands are paid by him; or partly on him, and partly on the spinners and weavers, in cases where these pay their own piecers. If it were wholly defrayed by the manufacturer, it would constitute a clear addition to the wages of the workpeople; if defrayed partly by the spinners and weavers, it would still, subject to this deduction, leave some addition to the whole body.

In this case, however, the increased cost of production, which, whether as a deduction from the profits of the manufacturer, or an increase to the price, could not but be imperceptibly small, would consist in so much addition to wages; and it would only be in as far as any real addition were thereby made to the amount of wages distributed among the unrestricted ages, that any increase at all could take place in the cost of production in consequence of the limitation of infant labour. There would be no diminution of the productiveness of industry, only a little more of the produce would go to wages, operating, according to circumstances, as deduction from profit or an increase of price. But in either case the increased cost of production would be limited distinctly, as it could only be caused, by the increase of wages. In as far, therefore, as the limitation of the labour of children is calculated to have this effect, it is clear that the measure must be attended with benefit to the body of the operatives, even in a pecuniary point of view. Indeed, so palpable is this consequence of the measure, that their not having more extensively applied for it, and their not hailing it as a boon, can only be accounted for by the delusion which they have laboured under of the great advantages to be expected from a measure of general restriction to reduced hours for hands of all ages; a measure by which they were to be enabled to obtain the wages of Twelve hours for work of Ten hours.

The tendency of that measure which, under the name of Lord Ashley's Bill, the operative classes so extensively petitioned for has been shown, in our First Report, to be widely different from that which they were taught to expect; and if any addition be wanted to the arguments there adduced, to show that the Ten Hours Bill, besides holding out a premium to foreign competition, was calculated to effect a reduction of both profit and wages, and of wages especially, in a ratio greater than the reduction of hours, it will be found in the great majority of the answers to the printed Query No. 37.

These answers, from manufacturers possessing great intelligence and practical knowledge, place the subject in a variety of points of view, and, with few exceptions, concur in the same conclusion as that which we have stated. They show in detail, what on general grounds must be obvious, that a compulsory abridgment of the hours of work of hands of all ages must, in a

corresponding ratio, diminish production, and consequently diminish the fund from whence alone wages and profit can arise.

A few there are, indeed, of the manufacturers who express themselves in favour of a ten hours bill; but the objections to their views on this point are abundantly supplied in nearly all the other answers to Query No. 37.

Some of them, however, while reprobating Lord Ashley's Bill, and showing the ruinous tendency of it to the operatives, to their employers, and to the community at large, propose, in their answers to Query No. 79, a general limitation of work,—a few to eleven and a half, and others, being the greater number, to eleven hours; and for the purpose of making this restriction effectual, they mostly suggest that it should be imposed on the moving power. We have, in our First Report, remarked on the effect which any interference with the moving power would have on contracts for steam, and on leases of water power; but, independently of this objection, on grounds of justice as well as policy, the same objections, differing only in degree, which were applicable to Lord Ashley's Bill, apply to any compulsory limitation of the working hours, for the ages embraced by that bill, short of the extent of labour within which, for the mutual advantage and convenience of the employers and operatives, it is the tendency of the manufacturers to settle.

Twelve hours for five days and nine on Saturdays, or sixty-nine hours in the week, appear, by almost universal consent, to be the extent of labour in factories which is consistent with the full efficiency of the workpeople, with due order and economy in the arrangement, and with cleanliness and proper preservation of the machinery. If, then, this be the usual time of fully efficient labour, any compulsory limitation to eleven hours (the suggestion of eleven hours and a half is hardly worth notice) would have the effect of diminishing production by one twelfth in all the branches of manufactures to which it applied. This would indeed be only half of the evil that was to be apprehended from Lord Ashley's Bill; but it would still be a great evil, operating in a reduction of wages to the operatives generally, while the young children would be still left to work for such a number of hours as is declared, by the preponderance of medical authority, to be injurious to their health, and is obviously incompatible with any view to their education. As far, then, as the mere pecuniary interests of the operatives are concerned, it is manifest that whereas by the restriction to eight hours for children the small reduction of wages to this class must be attended with a more than corresponding increase to all above the restricted ages, a restriction of all hands to eleven hours would occasion a diminution of wages to the whole body of workpeople engaged in the manufacture.

The proposal of an extension of the provisions of Sir John Hobhouse's Act affecting cotton factories to other principal branches of manufacture appears to be deserving of particular attention from the character and number of its supporters; and, as far as relates to the limitation of all persons under eighteen to twelve hours work, it has been superadded to our plan in the recent Act. This limitation, as it coincides with what, as before observed, may be considered to be the natural or ordinary duration of labour in factories, will probably, however erroneous it appears to us in principle, not materially interfere

with the productive powers of industry, nor consequently with wages and profits; but it does not meet the most urgent of the evils complained of,—the labour of children between the ages of nine and thirteen for a length of time incompatible with their health and education.

Among the suggestions by the manufacturers for remedying the evil of premature and excessive infant labour, is that of raising the age of prohibition of admission into factories,—a good many up to ten and eleven, several to twelve, and some few still higher. To such prohibition, although it might be expedient to resort to it, if it were the only alternative for rescuing the children from labour of equal duration with that of adults, there are the strongest possible objections, when there is the alternative of employing them, as we have proposed, for shorter hours, with the accompaniment of the opportunity and condition of education; for, independently of other reasons, it must be obvious, that whatever difficulty may exist in the way of finding sufficient numbers for halves or thirds of sets, would be doubled or trebled by total prohibition of those ages.

With reference to prohibition up to a higher age than the present, Mr. Benjamin Waterhouse of Godley, Cheshire, cotton spinner, makes the following remark in his answer, page 7, to printed Query 79:

“ In case the law should prevent children being employed in factories at a greater age than the present, it is very desirable that some general system of education be adopted, or it is probable that the condition and character of the rising generation will be rather injured than improved by the change.”

There can, we imagine, be little doubt that the hours of children redeemed from work, whether by prohibition or by relays, up to a certain age, might be productive of more evil from disorderly habits incident to idleness than of good by rescue from excessive labour, if means were not devised for devoting to the acquirement of useful instruction and good moral habits a part of the time curtailed from employment in the factories. We therefore consider, that the conditions relating to education form the most important part of our plan. If a system of universal education of all children between the ages of seven and fourteen complete, such as prevails in Prussia, were to be determined upon in this country, it would supersede the necessity of a legislative restriction on infant labour. There would be no alternative but that of not employing children under fourteen at all, or of employing them for shorter hours than those of adults. In the absence, however, of any system of general education, we may be permitted to claim, in behalf of that part of our plan which has been embodied in the recent Act, providing that the children shall pass a certain time in school as a condition of their employment in factories, the merit that while it answers the immediate purpose of an effectual security against their being sent from one mill to another on the same day, and affords to them a beneficial occupation of the time so detached from the factory, it will, if it succeeds, lay the best foundation for an extended system of education applicable to other classes of infant labourers besides those that are designated by the existing Act, and ultimately perhaps embracing all classes. Were it indeed proposed, without any reference to the mere question of infant labour in factories, to institute an experiment on a large scale, with a view to a system of general education, it may be

doubted whether any mode could be devised of making the trial more economically and more consistently with sound principle, or with greater chances of success, and with less risk of evil attending a failure, than that which we have proposed. At the same time we are prepared to admit, that the provisions relating to education are among those which are stated to be the most difficult to be immediately carried into effect. The very difficulty, however, which is experienced in providing the school accommodation and instruction required for compliance with some of the clauses of the Act, proves the great degree of neglect which has hitherto prevailed on that most important point, and in that degree is it desirable that the means should be afforded if they have not been sufficiently provided for by the recent regulation.

There will be found among the answers opinions strongly expressive of the importance of appointing inspectors or mill-wardens, with extensive functions and powers, as the only means of providing for the due execution of any factory regulations that might be enacted. Our recommendation for the appointment of such functionaries has been adopted, although the powers with which they have been invested are not so extensive as those which we had proposed with a view to the fullest efficiency.

We beg leave, in conclusion, to add, that having given the fullest consideration to the accompanying papers, and to all the information that from other sources has come before us in the interval which has elapsed since our First Report, we are enabled to state, as our deliberate conviction, that admitting a case to have been made out for legislative interference in curtailing the hours of work to which children of tender years in factories have heretofore been subjected, no plan so effectual for its immediate object, the benefit of the children, and liable to so few objections in all other respects, (it being of the very essence of interference with the hours of labour to be liable to great objections,) has been proposed as that which we then ventured to recommend, and which has been embodied, with some alterations, in the recent Factory Act. And we may perhaps be allowed to express a hope that the manufacturers, and the more instructed and better disposed of the operatives, will give all the aid they can to carry into effect a measure which is eminently calculated to promote the interests of both classes by its obvious tendency to ameliorate the condition, and to elevate the character, of the manufacturing population.

(L.S.)	THOMAS TOOKE.
(L.S.)	EDWIN CHADWICK.
(L.S.)	THOMAS SOUTHWOOD SMITH.

15th Feb. 1834.

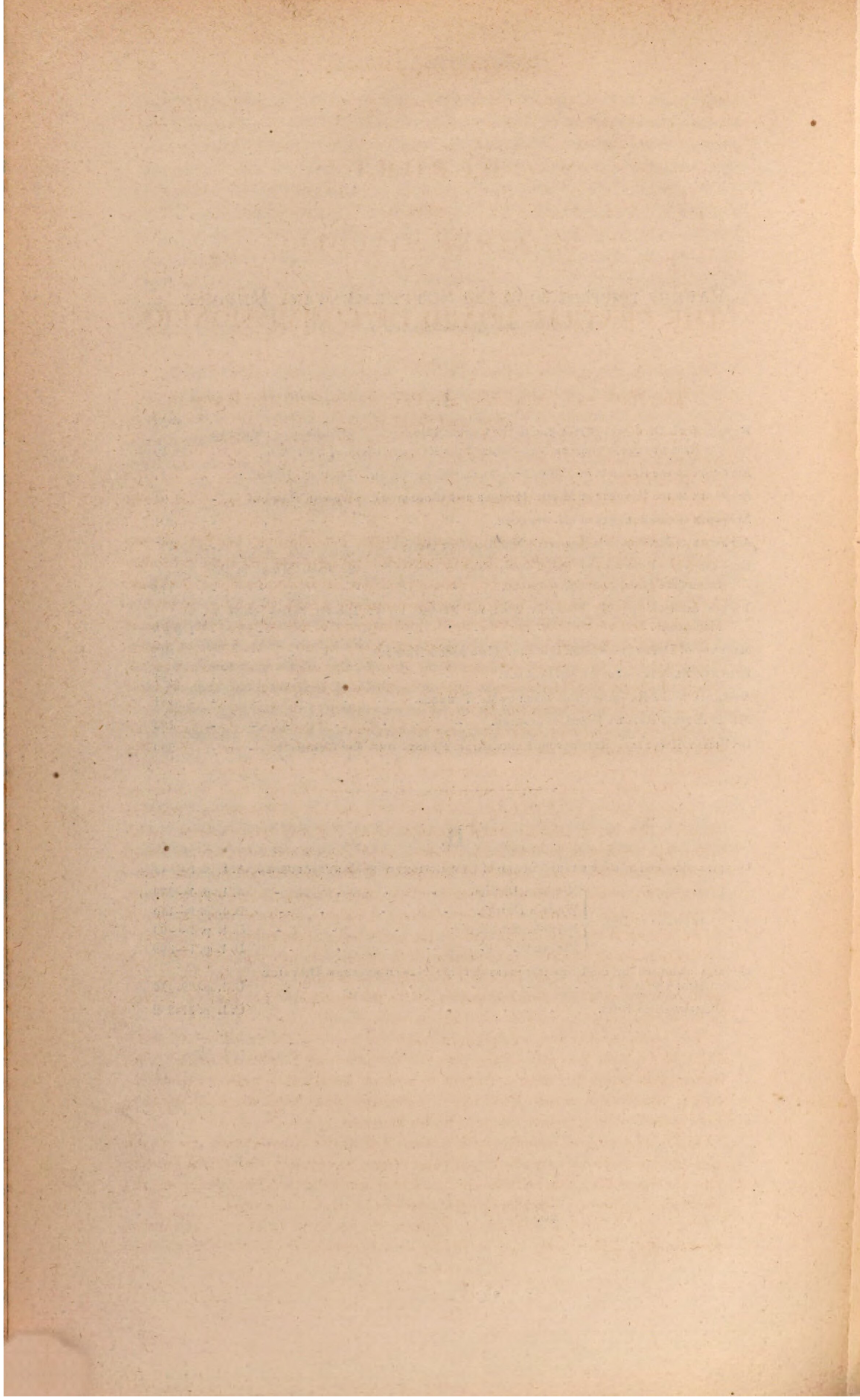
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R E P O R T
FROM
DR. JAMES MITCHELL
TO
THE CENTRAL BOARD OF COMMISSIONERS,
RESPECTING
The RETURNS made from the FACTORIES, and the RESULTS
obtained from them.

Gentlemen,

Having now completed the business entrusted to me, I have the honour to lay before you my REPORT:—

As the forms which were sent to the various factories throughout the kingdom embrace almost every particular respecting which information could be of use, and as the particulars were required to be given respecting the persons employed, one by one, the filling up of these forms, in the large factories particularly, was necessarily a work of very great trouble. Taking into account the short period allowed, in consequence of the urgency of the promoters of the bill before the legislature, it is very creditable to the industry of the District Commissioners, and to the masters and managers of the factories, that such a huge mass as these returns form should have been obtained. During the session of parliament, only such use could be made of them as was occasioned by the immediate urgency of demand for information on various points which arose; but having, since the conclusion of the session of parliament, had sufficient time to examine the returns one by one, and to arrange them, and to draw from them the information which they are capable of affording, I now communicate the results.

The principle adopted in the construction of the forms of return from the factories, requiring the particulars of the employed one by one, instead of general results, necessarily secured a degree of accuracy which otherwise could not have been expected. After having been engaged in the examination of these returns closely and attentively for several months, I have the most unqualified impression of their general fidelity; and I consider that the readiness with which so many of the employers and of the employed gave so minute information indicates on all sides an honesty of purpose, and a becoming confidence in the wisdom of the legislature, and in the benevolence of intention of His Majesty's government. In some factories, more particularly at Leeds, the returns show that information was withheld by several of the adult males, but in those cases the masters have stated such particulars as were within their own power. From the returns obtained from the factories in Scotland, I can see no trace of any desire to oppose inquiry.

A list of the factories from which returns have been obtained will be found in an Appendix, and it will be seen that in most instances they are sufficiently numerous to afford a fair section of the whole, and more particularly so as all of them have a general resemblance, so as to support each other. Every return, without exception, which was made out so as to be capable of being brought into account, has been used.

As the circumstances relating to the different descriptions of manufacture are not the same, I have divided the factories into different classes, according to the material manufactured, as cotton, wool, flax, and silk; and also further subdivided them into different districts, where the factories were sufficiently numerous to afford a satisfactory average.

The cotton factories of England are chiefly in the county of Lancaster. The returns from the town of Manchester and its vicinity were obtained by the District Commissioners

sent thither in a different form from the other returns, and the results from them have been made out by another party ; the number of persons, therefore, is considerably less than it would otherwise have been. Some of the masters have not specified one by one the weekly wages, which also still further reduces the number ; but there is enough to afford a satisfactory average. From Glasgow, and the neighbouring counties of Lanark, Renfrew, Ayr, and Stirling, a greater number of returns has been got, and embracing a greater number of persons than the returns from Lancashire, and these are classed together as another district.

Returns have also been obtained from the cotton factories of Aberdeen ; and although only one of them, that of Bannerman and Company, gives the particulars of the wages, a separate result has been worked out for it, for the purpose of comparison ; because, although from the invention of turnpike roads and steam navigation, Aberdeen is no longer so remote as formerly, it is still sufficiently far off to form a separate district. A separate result has also been worked out from two cotton factories at Belfast in Ireland.

From the factories working in wool, in England, abundant returns have been sent. Those in the north are nearly all in the West Riding of Yorkshire, and have been classed together. A few from the neighbouring districts, being insufficient to form in any instance a satisfactory average, have been conjoined with them. The wool factories in the West of England are situated in the counties of Gloucester, Somerset, and Wilts ; and in each of these counties they were so numerous as afford an ample average, and therefore a separate account has been taken of each. An account has been taken of the wool factories at Aberdeen.

Of the flax factories in England, returns, giving an account of the wages, have been received only from Leeds and its vicinity. These have been classed together, and a separate account has also been taken of one factory, that of Marshall and Co., to show how far the average of one single factory corresponds with the average of the whole.

The flax factories in Scotland are exceedingly numerous, and are situated chiefly at Aberdeen, Montrose, Arbroath, Dundee, Dunfermline, and in various towns, villages, and places in the eastern counties, from Aberdeen to the Forth. As, on examination, they were seen to be remarkably similar, they have all been collected into one general result ; a separate result of one of them—that of Grandholm at Aberdeen—in order to afford means of comparison.

The result is also given of a flax factory at Belfast in Ireland.

The silk factories of England have been classed into three districts : one of them includes the factories in Derbyshire, and some in the neighbouring counties ; the second includes the factories in Norfolk, Suffolk, and Essex ; and the third the factories in Somersetshire. A result has been worked out from the returns from some silk factories at Paisley in Scotland.

The returns from the potteries in Staffordshire have been worked out and collected into one result. A result has also been made out from one of the factories engaged in making lace in Devonshire, and another from several factories in and about Derby. There is also a result from two dye-houses at Leeds ; a result from two paper factories in Aberdeenshire ; and a result from a glass-house at Portobello in the county of Mid Lothian.

I considered it important, in the formation of the tables, to take a separate account of the males from the females, and this, not only as affording curious statistical information, but because regulations have been proposed respecting the one sex which did not apply to the other ; and also because the wages of the one sex were very different from the wages given to the other ; and several important inferences are thence derivable. I have ascertained the numbers employed at each particular age, from the youngest at which any are employed, which is six, to the most advanced age, which is eighty-eight. This was necessary in order to afford a complete view of the manufacturing population. It was more particularly necessary as legislative enactments have been made applicable to persons of certain ages, as, for instance, persons under nine years complete, under thirteen years of age, under eighteen years of age. The proportion of operatives affected by these regulations may be seen. Should any regulations hereafter be proposed respecting operatives of any other age, the proportion to be affected thereby may be easily ascertained. The weekly wages of all the persons employed at each particular age have been collected together, and divided by the number employed to obtain the average.

COTTON.

LANCASHIRE.					GLASGOW, &c.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
8	1	2 0	1	2 0	8	—	—	5	1 10 $\frac{1}{4}$
9	41	2 3 $\frac{1}{2}$	32	2 3	9	51	1 10 $\frac{1}{4}$	48	1 7
10	204	2 6 $\frac{1}{2}$	122	2 11 $\frac{1}{2}$	10	232	2 1	203	2 1 $\frac{3}{4}$
11	195	3 1 $\frac{3}{4}$	198	3 2	11	284	2 8 $\frac{1}{4}$	322	2 7
12	245	3 7	241	3 7 $\frac{3}{4}$	12	314	2 11 $\frac{1}{4}$	423	2 7 $\frac{1}{2}$
13	233	4 2 $\frac{1}{2}$	233	3 9 $\frac{3}{4}$	13	322	3 7 $\frac{1}{2}$	466	3 6 $\frac{1}{2}$
14	256	4 8 $\frac{1}{2}$	236	4 11 $\frac{1}{2}$	14	338	4 5 $\frac{1}{4}$	483	4 7 $\frac{1}{4}$
15	240	5 3	215	5 8	15	261	4 7 $\frac{1}{2}$	468	5 2 $\frac{3}{4}$
16	204	6 11 $\frac{1}{2}$	256	6 0 $\frac{1}{2}$	16	225	5 6 $\frac{1}{4}$	493	5 5
17	141	7 4 $\frac{1}{2}$	245	6 5 $\frac{3}{4}$	17	191	7 5 $\frac{1}{2}$	518	6 1 $\frac{3}{4}$
18	164	11 9	279	7 6 $\frac{1}{2}$	18	178	8 4 $\frac{1}{4}$	524	6 5
19	135	11 6 $\frac{1}{4}$	251	8 2	19	146	11 5 $\frac{1}{4}$	502	6 4 $\frac{3}{4}$
20	92	13 5 $\frac{1}{4}$	209	8 1 $\frac{1}{2}$	20	141	15 0 $\frac{1}{4}$	415	6 6 $\frac{3}{4}$
21	180	13 1 $\frac{1}{4}$	251	8 0 $\frac{1}{4}$	21	116	16 5 $\frac{3}{4}$	294	6 10 $\frac{1}{2}$
22	145	16 9 $\frac{1}{2}$	192	8 6 $\frac{1}{2}$	22	128	17 1	361	7 5 $\frac{1}{4}$
23	104	18 8	138	8 4 $\frac{1}{2}$	23	101	18 5 $\frac{1}{4}$	236	7 1 $\frac{1}{2}$
24	83	18 7 $\frac{1}{2}$	100	8 4 $\frac{3}{4}$	24	102	18 8	207	7 2
25	100	18 10 $\frac{3}{4}$	99	8 10	25	94	20 10 $\frac{1}{2}$	154	7 3 $\frac{3}{4}$
26	73	18 5	72	9 0	26	104	20 8 $\frac{3}{4}$	185	6 6 $\frac{3}{4}$
27	79	20 8	67	8 9	27	73	18 9	120	6 9 $\frac{1}{4}$
28	75	21 5 $\frac{1}{4}$	54	8 1	28	94	19 3	141	7 4 $\frac{3}{4}$
29	52	20 1	45	8 4	29	81	20 10 $\frac{1}{4}$	98	7 5
30	76	21 1 $\frac{3}{4}$	57	9 1	30	106	20 1 $\frac{3}{4}$	130	7 2 $\frac{1}{2}$
31	31	22 10 $\frac{1}{2}$	21	9 10	31	43	21 9	49	6 7 $\frac{3}{4}$
32	51	23 2	24	10 3	32	93	20 9 $\frac{3}{4}$	55	8 2 $\frac{1}{2}$
33	46	23 6 $\frac{3}{4}$	20	8 9	33	75	20 9 $\frac{1}{2}$	47	7 6 $\frac{1}{2}$
34	41	20 8 $\frac{1}{4}$	10	7 1 $\frac{1}{2}$	34	54	20 2	45	7 8 $\frac{1}{2}$
35	46	23 3	25	8 0	35	66	20 2	59	6 9 $\frac{1}{2}$
36	45	23 2	22	10 3	36	52	18 8 $\frac{1}{4}$	61	7 1 $\frac{1}{4}$
37	21	21 11 $\frac{1}{2}$	13	10 0	37	42	19 1 $\frac{1}{2}$	29	6 6 $\frac{1}{4}$
38	38	22 11	21	9 10 $\frac{3}{4}$	38	53	21 6 $\frac{1}{2}$	44	6 8 $\frac{1}{2}$
39	26	19 8 $\frac{1}{2}$	10	9 8 $\frac{1}{4}$	39	50	20 5	17	6 4
40	38	20 3 $\frac{1}{2}$	15	8 8	40	82	18 8 $\frac{1}{4}$	67	6 5 $\frac{3}{4}$
41	17	19 5 $\frac{1}{2}$	11	8 2 $\frac{3}{4}$	41	29	19 6 $\frac{1}{4}$	16	6 3 $\frac{3}{4}$
42	34	22 0 $\frac{1}{2}$	12	10 9	42	38	21 2	24	6 0 $\frac{3}{4}$
43	12	21 10	6	9 5 $\frac{1}{4}$	43	23	18 5	8	8 1 $\frac{1}{2}$
44	18	20 9 $\frac{1}{2}$	4	9 0 $\frac{3}{4}$	44	43	18 2	17	5 9
45	17	17 3	5	8 11 $\frac{1}{2}$	45	26	20 2 $\frac{1}{4}$	27	6 3
46	13	19 8 $\frac{1}{4}$	10	10 4	46	20	18 0	8	7 8
47	18	14 1	3	9 0	47	24	17 6	5	6 3
48	21	18 7	4	9 9	48	27	19 11	6	8 1
49	9	14 4 $\frac{1}{2}$	4	7 10	49	14	22 9	2	4 6
50	27	16 4	2	7 3	50	32	17 7	20	7 7 $\frac{1}{2}$
51	6	14 11	—	—	51	14	17 5	—	—
52	7	24 4	1	6 0	52	16	16 10	5	6 2
53	6	10 11 $\frac{1}{4}$	—	—	53	9	20 4	4	6 9
54	12	14 6	1	7 6	54	16	15 1	2	4 3
55	10	16 10 $\frac{3}{4}$	2	11 7 $\frac{1}{2}$	55	14	19 4	7	7 3
56	5	15 4	—	—	56	11	15 9 $\frac{3}{4}$	3	8 10
57	3	11 10 $\frac{1}{2}$	1	6 0	57	8	15 0	4	6 5
58	3	11 7	1	6 6	58	9	15 4	3	5 5
59	8	15 3 $\frac{1}{4}$	—	—	59	5	19 8	1	2 6
60	9	13 6	1	6 6	60	12	14 9	5	6 10
61	1	15 0	—	—	61	2	15 0	3	5 1
62	3	20 0	—	—	62	1	21 0	1	5 0
63	2	7 9	—	—	63	10	15 11	2	5 6
64	1	12 4	1	6 0	64	1	19 0	1	6 0
65	1	13 0	—	—	65	3	17 0	—	—
66	—	—	—	—	66	4	16 9	1	4 0
67	1	7 3	1	6 0	67	5	19 9	—	—
68	2	14 6	—	—	68	2	17 0	—	—
69	1	8 0	—	—	69	1	12 0	1	4 0
70	—	—	—	—	70	3	13 4	—	—
72	1	18 0	—	—	71	1	8 0	—	—
80	1	8 8	—	—	72	2	10 6	—	—
					73	2	13 6	—	—
					74	4	15 0	—	—
					75	2	7 6	—	—
					76	2	8 6	—	—
					77	2	11 0	—	—
					79	1	9 0	—	—
					88	1	8 0	—	—
3,770			3,844		4,631			7,445	

FACTORY COMMISSION:

COTTON.

ABERDEEN.					BELFAST.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
9	—	—	2	1 9	10	4	1 9	6	1 6½
10	—	—	20	1 10	11	12	2 3½	16	1 10
11	2	3 6	25	2 2	12	12	2 6	25	1 11
12	1	3 6	27	2 8½	13	13	3 1	24	2 5½
13	3	3 6	30	3 3	14	15	3 9¾	22	3 0½
14	4	4 10½	30	3 7½	15	13	3 10¾	30	3 10½
15	1	5 0	26	4 0	16	11	4 4	28	4 5½
16	1	4 0	30	5 7¼	17	15	5 6¼	41	4 2
17	2	5 6	28	5 7¾	18	13	8 6¼	42	4 6½
18	—	—	27	5 10	19	7	13 6¼	30	4 6¾
19	—	—	30	5 8	20	3	9 11	40	4 8¾
20	1	6 6	19	6 4	21	4	12 6	25	4 9
21	1	13 0	14	5 11	22	8	20 3	16	4 8
22	1	13 0	16	5 7¾	23	3	23 0	20	6 1
23	4	11 11½	15	6 2	24	4	20 3	18	4 9½
24	1	12 0	12	6 3½	25	3	17 8	11	4 9¾
25	3	17 4	8	6 0	26	7	17 11	16	4 9½
26	3	15 0	6	6 0	27	6	18 8	3	4 10
27	4	14 0	5	6 5¼	28	1	5 0	4	5 4
28	1	20 0	3	5 11	29	1	30 0	6	5 1
29	1	22 0	2	6 3	30	4	28 3	11	4 9¾
30	3	11 2	2	5 0	31	3	17 9	4	4 9½
31	2	18 3	—	—	32	—	—	2	5 1½
32	—	—	2	6 3	33	2	12 6	3	5 0
33	2	14 9	—	—	34	4	21 0	4	4 9
34	2	13 6	—	—	35	1	20 0	5	4 10
35	1	15 0	—	—	36	2	23 9	—	—
36	1	20 0	1	6 6	37	1	15 0	—	—
37	1	21 0	—	—	38	2	21 0	—	—
38	1	15 0	1	5 6	39	2	24 0	—	—
39	—	—	1	5 6	40	3	23 4	3	5 0
40	1	12 0	1	5 0	41	2	21 0	1	4 0
42	1	11 0	—	—	42	1	29 0	—	—
43	1	17 0	—	—	43	2	13 6	—	—
45	1	11 0	—	—	44	2	30 6	1	4 7
47	1	14 6	—	—	45	1	13 0	1	4 6
48	1	12 0	—	—	46	4	21 7	4	4 7
54	1	11 0	—	—	47	3	20 0	2	4 3
56	1	10 0	—	—	48	3	14 4	—	—
60	1	10 0	—	—	49	2	12 6	—	—
					50	3	18 6	2	4 6
					51	1	10 0	—	—
					52	1	29 0	—	—
					54	2	16 0	1	4 6
					55	—	—	1	5 0
					56	2	7 3	—	—
					57	2	12 6	—	4 6
					58	—	—	—	—
					59	1	10 0	—	—
					60	3	14 0	—	—
					64	—	—	—	12 0
					67	1	8 0	—	—
					68	—	—	—	—
					69	—	—	1	—
					70	1	7 0	—	—
					77	1	9 0	—	—
	56		383			217		470	

WOOL.

LEEDS.					GLOUCESTERSHIRE.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
6	1	1 6	1	1 6	6	2	2 0	—	—
7	2	1 6	2	2 3	7	5	1 1 $\frac{1}{4}$	1	1 6
8	26	2 0	31	2 9 $\frac{1}{4}$	8	11	1 4	9	1 8 $\frac{1}{2}$
9	85	2 3 $\frac{1}{4}$	63	2 9	9	47	1 9 $\frac{1}{4}$	25	1 11
10	100	2 9	100	2 9 $\frac{1}{2}$	10	69	2 2 $\frac{1}{4}$	40	1 8 $\frac{1}{4}$
11	121	3 3 $\frac{1}{4}$	117	3 4	11	57	2 4 $\frac{1}{4}$	25	2 0
12	140	3 8	114	3 7	12	67	2 7 $\frac{1}{2}$	31	2 7
13	162	4 4	117	4 11	13	72	3 1 $\frac{1}{2}$	40	2 6 $\frac{1}{4}$
14	164	4 9 $\frac{1}{4}$	143	4 9 $\frac{1}{4}$	14	66	3 6	31	2 10 $\frac{3}{4}$
15	113	5 8 $\frac{3}{4}$	133	6 1 $\frac{1}{4}$	15	71	3 11 $\frac{1}{2}$	26	3 0 $\frac{1}{4}$
16	124	7 2 $\frac{1}{4}$	140	5 5 $\frac{1}{4}$	16	53	4 3	35	3 5 $\frac{1}{2}$
17	90	7 6 $\frac{1}{2}$	118	5 9	17	42	5 7	38	4 4 $\frac{1}{4}$
18	115	9 8 $\frac{1}{2}$	108	7 1 $\frac{3}{4}$	18	40	7 1	27	4 7
19	81	12 0 $\frac{1}{2}$	113	6 10 $\frac{1}{2}$	19	27	8 7	28	4 11
20	65	12 2 $\frac{1}{4}$	80	7 0 $\frac{1}{2}$	20	20	8 5	38	5 5 $\frac{1}{4}$
21	73	17 0 $\frac{1}{4}$	82	7 1 $\frac{1}{2}$	21	23	10 2	18	5 8 $\frac{3}{4}$
22	61	19 2 $\frac{1}{4}$	69	6 5 $\frac{1}{2}$	22	16	11 0 $\frac{1}{2}$	16	5 1 $\frac{1}{2}$
23	65	20 4	50	7 7 $\frac{1}{2}$	23	32	11 5 $\frac{1}{2}$	23	5 7 $\frac{1}{2}$
24	54	20 2 $\frac{1}{2}$	38	6 6 $\frac{1}{4}$	24	22	13 3 $\frac{1}{4}$	8	5 9 $\frac{1}{4}$
25	49	21 0 $\frac{3}{4}$	46	7 3 $\frac{1}{2}$	25	23	11 3 $\frac{3}{4}$	14	5 2 $\frac{1}{2}$
26	57	19 7	43	7 7 $\frac{1}{4}$	26	20	13 8 $\frac{3}{4}$	21	5 6 $\frac{1}{4}$
27	34	21 11 $\frac{1}{4}$	26	7 2 $\frac{3}{4}$	27	20	13 4	17	5 7 $\frac{1}{4}$
28	52	25 6	26	7 3	28	25	12 8	12	4 11
29	45	24 4 $\frac{1}{4}$	37	7 4 $\frac{1}{2}$	29	19	12 0	17	6 5 $\frac{1}{2}$
30	53	20 9 $\frac{1}{2}$	42	7 3 $\frac{1}{2}$	30	27	13 1 $\frac{1}{4}$	12	5 3 $\frac{1}{4}$
31	53	20 6	17	7 10	31	14	15 0 $\frac{1}{4}$	9	4 11 $\frac{1}{4}$
32	47	21 2 $\frac{1}{2}$	15	7 6	32	25	14 8 $\frac{1}{2}$	9	5 0
33	56	23 1	10	6 11	33	16	16 8 $\frac{1}{4}$	15	5 4 $\frac{1}{2}$
34	46	24 3	11	6 7	34	8	16 6 $\frac{3}{4}$	9	6 11 $\frac{1}{4}$
35	49	23 4 $\frac{1}{2}$	32	7 3 $\frac{1}{4}$	35	20	13 6 $\frac{1}{2}$	12	6 0 $\frac{1}{2}$
36	28	23 3	23	7 6 $\frac{1}{2}$	36	13	14 10	8	5 2 $\frac{1}{4}$
37	33	23 8 $\frac{1}{2}$	17	8 3	37	13	13 10	10	5 6
38	35	22 6 $\frac{1}{4}$	8	7 5	38	17	13 10 $\frac{1}{2}$	10	4 10
39	27	21 1	22	8 0	39	10	14 7	3	6 6
40	42	22 1	15	6 8	40	17	14 7 $\frac{1}{2}$	19	5 3 $\frac{1}{2}$
41	25	22 7	17	6 4 $\frac{1}{2}$	41	14	15 2	6	5 9
42	40	23 8	10	8 11	42	9	12 10	7	6 3
43	37	21 6 $\frac{3}{4}$	8	6 4 $\frac{1}{4}$	43	8	14 0	8	4 10 $\frac{3}{4}$
44	27	20 2	12	6 4	44	12	14 3	9	5 7 $\frac{1}{4}$
45	29	21 0 $\frac{1}{2}$	5	6 3	45	16	12 1 $\frac{1}{2}$	8	5 4 $\frac{3}{4}$
46	27	22 4 $\frac{1}{2}$	10	7 3 $\frac{1}{2}$	46	9	14 4 $\frac{1}{2}$	5	5 9 $\frac{3}{4}$
47	24	20 4 $\frac{1}{2}$	3	7 8	47	13	12 7 $\frac{1}{2}$	7	4 7 $\frac{1}{4}$
48	23	25 3	6	6 10	48	5	13 7 $\frac{1}{2}$	7	5 11
49	20	21 7 $\frac{3}{4}$	3	6 0	49	7	14 1 $\frac{3}{4}$	8	5 8 $\frac{1}{4}$
50	24	20 5	6	7 11	50	24	11 0 $\frac{3}{4}$	10	7 7 $\frac{1}{4}$
51	17	19 6	2	8 3	51	4	12 0	2	2 9
52	21	21 4 $\frac{3}{4}$	3	7 4	52	6	11 10	4	5 0
53	11	20 2 $\frac{1}{4}$	—	—	53	6	10 0	—	—
54	15	23 5	1	7 0	54	14	12 2 $\frac{1}{2}$	1	4 6
55	12	20 9	3	7 2	55	5	10 7	6	5 3
56	12	18 8	3	6 4	56	5	14 7 $\frac{1}{2}$	3	5 0
57	7	22 1 $\frac{1}{4}$	4	7 7 $\frac{1}{2}$	57	3	30 0	2	5 0
58	9	24 0	1	6 0	58	8	10 2 $\frac{1}{2}$	2	5 0
59	5	23 2 $\frac{1}{4}$	2	7 0	59	—	—	2	5 9
60	11	21 5	1	4 6	60	6	9 1	4	4 3
61	5	17 4 $\frac{1}{4}$	—	—	61	3	13 4	2	5 9
62	13	20 1 $\frac{3}{4}$	1	6 0	62	4	8 9	1	7 0
63	5	18 7	—	—	63	1	18 0	2	3 6
64	7	23 8 $\frac{1}{4}$	1	6 3	64	4	14 3	2	3 3
65	2	21 6	1	5 0	65	1	14 0	1	5 9
66	2	11 0	—	—	66	2	10 9	—	—
67	4	18 6	—	—	67	1	12 0	—	—
68	2	21 0	—	—	68	1	15 0	—	—
69	4	16 6	—	—	69	1	14 0	—	—
70	2	16 6	—	—	70	2	2 10 $\frac{1}{2}$	—	—
71	4	14 6	—	—	73	1	15 0	—	—
72	—	—	—	—	74	—	—	1	1 6
73	1	26 0	—	—	75	1	7 6	—	—
80	—	—	1	7 0	76	2	11 0	—	—
					77	—	—	1	7 0
					78	1	6 0	—	—
					79	1	8 0	—	—
	2,795		2,113			1,229		767	

FACTORY COMMISSION:

WOOL.

SOMERSETSHIRE.					WILTSHIRE.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
7	1	2 0	2	2 0	6	1	0 8	—	—
8	6	2 3	1	2 0	7	1	1 6	1	2 0
9	20	2 0 $\frac{1}{4}$	7	2 0	8	9	1 10 $\frac{1}{2}$	4	2 4 $\frac{3}{4}$
10	29	2 3	8	1 11 $\frac{1}{4}$	9	33	2 2	12	2 0 $\frac{3}{4}$
11	33	2 9	9	2 1	10	71	2 2 $\frac{1}{2}$	18	2 5 $\frac{1}{2}$
12	30	3 0	9	2 8 $\frac{1}{4}$	11	105	2 4 $\frac{1}{2}$	31	2 4 $\frac{1}{2}$
13	20	3 0 $\frac{1}{2}$	18	2 9	12	105	2 5 $\frac{1}{4}$	32	2 6 $\frac{1}{2}$
14	34	3 10 $\frac{3}{4}$	19	3 3 $\frac{1}{4}$	13	103	3 2	21	2 10
15	15	4 6 $\frac{3}{4}$	7	3 7 $\frac{3}{4}$	14	128	3 1 $\frac{3}{4}$	27	2 8
16	21	4 7 $\frac{3}{4}$	13	4 5 $\frac{1}{2}$	15	128	3 4	24	3 5
17	18	6 6 $\frac{1}{2}$	22	4 1 $\frac{3}{4}$	16	102	4 3 $\frac{1}{2}$	38	3 7 $\frac{1}{4}$
18	13	8 6 $\frac{1}{2}$	25	5 6	17	71	4 1 $\frac{1}{2}$	27	4 9
19	12	8 8 $\frac{1}{2}$	10	5 8 $\frac{3}{4}$	18	59	6 7	27	4 8
20	16	10 9 $\frac{1}{2}$	21	5 10	19	31	7 9	25	5 3
21	9	14 4 $\frac{1}{2}$	11	5 11 $\frac{3}{4}$	20	46	9 2	19	5 5
22	7	14 9 $\frac{1}{2}$	19	6 2 $\frac{3}{4}$	21	28	9 5 $\frac{1}{4}$	21	5 5 $\frac{3}{4}$
23	14	14 8 $\frac{1}{2}$	17	6 2	22	34	10 10 $\frac{1}{4}$	20	5 8 $\frac{1}{2}$
24	12	13 10 $\frac{1}{2}$	9	8 2 $\frac{1}{2}$	23	27	11 9	16	5 2
25	20	16 8 $\frac{3}{4}$	11	5 11 $\frac{1}{4}$	24	26	13 2 $\frac{1}{4}$	19	5 11
26	5	15 0	7	6 2 $\frac{1}{2}$	25	27	12 5 $\frac{1}{2}$	19	7 10
27	12	16 10 $\frac{1}{2}$	7	6 10 $\frac{1}{2}$	26	29	13 6	14	5 4 $\frac{3}{4}$
28	9	16 4 $\frac{1}{2}$	7	8 6	27	26	10 9	9	6 1 $\frac{1}{2}$
29	14	16 1	5	7 7 $\frac{1}{4}$	28	29	13 8	17	7 3 $\frac{1}{2}$
30	13	17 1 $\frac{1}{2}$	9	7 3 $\frac{1}{4}$	29	29	16 4	17	6 3
31	9	17 1	3	6 4 $\frac{1}{2}$	30	48	15 1	29	5 7 $\frac{1}{2}$
32	12	17 4	6	10 1	31	16	16 0	11	6 7
33	11	18 1 $\frac{1}{2}$	7	7 4 $\frac{1}{2}$	32	28	14 7	16	6 6 $\frac{1}{4}$
34	11	18 9	1	8 0	33	25	15 8 $\frac{1}{2}$	20	6 2 $\frac{1}{2}$
35	11	18 1	8	8 6 $\frac{1}{2}$	34	30	15 10 $\frac{1}{2}$	21	8 5
36	13	18 10	3	5 6	35	37	14 10	19	7 1
37	3	20 8	8	9 0 $\frac{3}{4}$	36	25	13 8	21	6 0
38	7	18 9	5	6 7 $\frac{1}{4}$	37	15	14 9	11	6 0 $\frac{1}{4}$
39	7	19 4	4	5 6 $\frac{3}{4}$	38	23	13 2 $\frac{1}{4}$	13	6 7 $\frac{1}{4}$
40	12	21 3	8	7 1	39	23	15 8	17	6 1
41	11	16 1	3	7 11	40	37	10 11 $\frac{1}{4}$	31	6 1 $\frac{3}{4}$
42	10	16 9	4	8 9	41	10	13 7 $\frac{1}{4}$	9	6 10
43	9	16 9 $\frac{1}{4}$	8	5 6 $\frac{1}{4}$	42	24	13 9 $\frac{1}{4}$	10	6 1 $\frac{1}{2}$
44	8	17 9	2	7 3	43	21	14 10	6	5 10
45	3	17 0	4	7 4 $\frac{1}{2}$	44	19	14 3 $\frac{3}{4}$	7	5 3 $\frac{1}{2}$
46	11	18 4	3	7 7 $\frac{1}{4}$	45	28	16 0	12	5 10 $\frac{1}{2}$
47	5	20 7 $\frac{1}{2}$	2	8 11	46	14	17 1	11	5 7 $\frac{1}{4}$
48	6	12 8	5	6 4	47	9	13 1	7	5 0
49	7	14 2 $\frac{1}{2}$	5	5 8	48	15	14 7	7	6 2 $\frac{1}{2}$
50	7	14 5 $\frac{1}{4}$	1	6 2	49	18	15 1	11	6 6
51	4	14 4 $\frac{3}{4}$	3	5 8	50	17	14 4	18	5 7
52	7	18 7 $\frac{3}{4}$	2	6 0	51	19	13 5 $\frac{1}{2}$	2	7 8 $\frac{1}{2}$
53	2	9 0	1	10 0	52	11	16 7 $\frac{1}{2}$	6	5 3
54	—	—	1	10 0	53	18	10 1	7	5 6
55	4	15 5 $\frac{1}{4}$	—	—	54	6	20 5	6	5 5
56	1	6 0	1	2 0	55	7	13 9	7	4 8 $\frac{3}{4}$
57	2	11 6	—	—	56	4	12 11 $\frac{1}{2}$	2	7 3
58	3	13 10	1	7 0	57	6	11 10	5	6 10 $\frac{3}{4}$
59	2	20 10 $\frac{1}{2}$	—	—	58	11	7 8 $\frac{3}{4}$	5	4 7 $\frac{1}{4}$
60	3	14 0	3	6 9 $\frac{1}{2}$	59	5	15 0	2	5 0
61	2	10 0	—	—	60	10	13 4	6	3 9
62	2	14 0	2	4 7	61	9	10 5	1	4 6
63	—	—	1	2 0	62	5	9 9	1	5 0
64	2	12 6	—	—	63	4	13 6	—	—
68	1	10 0	1	8 0	64	5	13 2	2	6 6
69	—	—	1	2 0	65	7	8 4	4	5 1 $\frac{1}{2}$
70	3	16 0	—	—	66	2	13 6	1	2 6
71	—	—	—	—	67	2	5 0	1	6 0
72	1	11 8	—	—	68	1	4 0	1	6 0
73	—	—	1	2 0	69	1	12 0	—	—
					70	2	2 10 $\frac{1}{2}$	1	6 0
					71	1	5 0	—	—
					73	3	6 0	1	4 0
					75	2	8 6	—	—
	596		381			1,871		826	

W O O L.

ABERDEEN.					ABERDEEN—continued.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
9	4	2 6	1	3 9	41	3	9 8	—	—
10	2	2 6	10	3 0	42	3	14 4	1	5 0
11	10	2 8½	24	2 11½	43	6	12 10¾	—	—
12	22	3 3½	37	3 3½	44	6	15 0	—	—
13	8	3 5½	49	3 4½	45	1	17 0	2	5 0
14	13	4 5	46	3 10½	46	4	17 9	1	5 6
15	15	5 9¾	39	4 5	47	1	18 0	1	5 0
16	5	4 1	33	4 6½	48	3	12 8	1	6 0
17	8	4 6	45	5 0	49	3	15 0	2	5 3
18	8	8 6	40	5 2	50	10	12 3	5	4 8½
19	2	9 6	36	5 5	51	5	14 4	1	5 0
20	4	12 4	29	5 5¾	52	5	15 5	5	4 9¾
21	6	13 4	22	5 5½	53	2	10 0	1	5 0
22	4	13 3½	14	5 7	54	1	21 0	—	—
23	6	12 7½	24	5 6	55	—	—	1	5 0
24	11	13 8	18	5 9	56	6	15 0¾	1	4 0
25	5	13 2½	18	5 9	57	1	16 0	—	—
26	5	15 10¾	12	5 6¾	58	1	9 0	—	—
27	7	14 5	14	5 0¼	59	1	9 0	1	4 6
28	6	16 4	15	5 1½	60	9	12 9¼	3	4 8
29	4	13 9½	9	5 9	62	2	10 0	—	—
30	9	13 8	11	5 7	63	1	14 0	—	—
31	8	15 4½	7	5 2¼	65	1	18 0	—	—
32	5	12 10½	2	5 0	66	1	11 0	—	—
33	5	13 9¾	4	6 6½	67	1	12 0	—	—
34	4	16 8	4	5 4½	68	1	7 6	—	—
35	2	24 1	2	4 9	69	—	—	1	4 6
36	6	16 8	3	5 4	70	2	10 0½	—	—
37	4	15 3	—	—	71	1	12 0	1	2 6
38	9	15 0	4	5 4½	72	1	12 0	—	—
39	4	12 11½	—	—	73	1	10 0	—	—
40	10	14 7	7	5 9½	75	—	—	1	4 0
					76	1	12 0	—	—
						305		608	

FACTORY COMMISSION:

F L A X.

LEEDS.					MARSHALL & Co., LEEDS.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
9	16	2 11 $\frac{1}{4}$	12	2 9 $\frac{3}{4}$	9	7	3 0	7	3 0
10	38	2 9 $\frac{3}{4}$	33	2 9 $\frac{1}{4}$	10	2	3 0	6	3 0 $\frac{1}{2}$
11	83	4 1 $\frac{3}{4}$	105	3 1 $\frac{1}{4}$	11	32	3 4 $\frac{1}{2}$	61	3 1
12	125	4 5 $\frac{1}{2}$	134	3 4 $\frac{1}{2}$	12	71	3 6	88	3 4 $\frac{1}{2}$
13	90	4 8	127	4 0 $\frac{1}{2}$	13	45	3 8	80	3 11
14	71	5 3	128	4 5 $\frac{3}{4}$	14	40	4 2	83	4 4
15	47	5 10 $\frac{3}{4}$	140	5 0	15	23	4 7	77	4 11
16	30	5 9 $\frac{3}{4}$	138	5 7 $\frac{3}{4}$	16	14	6 4	88	5 5
17	38	7 9	150	5 8	17	20	8 0	70	5 7 $\frac{1}{2}$
18	23	10 5	124	5 9 $\frac{3}{4}$	18	12	10 2	60	5 9 $\frac{1}{2}$
19	21	11 11	104	5 11 $\frac{1}{2}$	19	14	11 6	41	6 0
20	22	13 10 $\frac{1}{2}$	80	6 0 $\frac{1}{2}$	20	11	14 4	29	6 0 $\frac{1}{2}$
21	22	14 10	62	5 11 $\frac{3}{4}$	21	8	14 10	25	6 2
22	17	16 8	49	6 2 $\frac{1}{2}$	22	7	15 8	19	6 2 $\frac{1}{2}$
23	10	17 5	29	6 2 $\frac{1}{2}$	23	3	18 4	16	6 4
24	12	18 4 $\frac{1}{4}$	33	6 3 $\frac{1}{2}$	24	5	20 0	7	6 4
25	9	18 5 $\frac{3}{4}$	11	6 3	25	1	18 0	5	6 4
26	11	17 2 $\frac{1}{2}$	11	6 3 $\frac{1}{4}$	26	5	20 0	3	6 2
27	13	16 5 $\frac{3}{4}$	12	6 3 $\frac{1}{2}$	27	6	18 0	5	6 6
28	14	22 0	14	6 1	28	7	19 10	3	6 0
29	19	19 2 $\frac{1}{2}$	7	6 0 $\frac{3}{4}$	29	9	20 3	7	6 0
30	17	20 5 $\frac{1}{2}$	13	6 1 $\frac{1}{2}$	30	7	19 5	1	6 4
31	9	17 10 $\frac{1}{4}$	3	5 9 $\frac{3}{4}$	31	3	19 0	—	5 9
32	8	20 11 $\frac{1}{2}$	3	6 0	32	2	27 6	2	—
33	12	20 2 $\frac{1}{2}$	2	6 4	33	6	22 0	1	6 4 $\frac{1}{2}$
34	9	18 7	1	6 6	34	4	21 6	2	6 6
35	15	19 3 $\frac{1}{2}$	5	6 4 $\frac{1}{2}$	35	6	20 0	1	6 6
36	12	20 8	3	6 3 $\frac{1}{4}$	36	4	22 6	—	5 9
37	14	19 8	—	—	37	5	21 7	1	—
38	16	13 9	2	6 3	38	5	22 0	—	6 6
39	9	18 8	1	6 2	39	1	29 0	1	—
40	15	18 1	3	6 4	40	5	20 10	—	6 6
41	9	20 0 $\frac{1}{2}$	—	6 0	41	2	24 6	2	—
42	12	18 0	4	6 0	42	4	20 0	—	6 0
43	16	20 4	—	—	43	6	21 8	—	—
44	9	18 11 $\frac{3}{4}$	2	6 0	44	4	22 0	—	—
45	18	19 11 $\frac{1}{2}$	—	—	45	9	22 0	1	—
46	8	19 4 $\frac{1}{2}$	2	6 3	46	3	21 4	—	6 6
47	9	19 8	1	6 3	47	3	19 8	—	—
48	5	19 0	1	6 0	48	2	20 0	—	—
49	6	20 11 $\frac{1}{4}$	—	—	50	4	19 6	—	—
50	9	19 2 $\frac{1}{4}$	—	—	51	1	24 0	—	—
51	7	18 5	—	—	54	1	16 0	—	—
52	10	17 4	—	—	55	1	16 0	—	—
53	7	17 11 $\frac{1}{2}$	—	—	57	1	20 0	—	—
54	6	19 6	1	6 0	58	1	18 0	—	—
55	5	18 5	—	—	60	3	21 0	—	—
56	6	17 8	—	—	61	2	27 0	—	—
57	4	18 3	2	6 0	67	1	26 0	—	—
58	1	18 0	—	—	68	1	15 0	—	—
59	6	15 10	—	—	69	1	12 0	—	—
60	5	18 2 $\frac{1}{2}$	—	—	70	2	14 0	—	—
61	2	27 0	—	—	71	1	20 0	—	—
62	1	20 0	—	—	72	1	20 0	—	—
63	4	16 9	—	—	75	1	18 0	—	—
65	1	10 0	—	—	76	—	—	—	—
66	3	12 0	—	—					
67	3	16 6 $\frac{3}{4}$	—	—					
68	2	13 0	—	—					
69	1	12 0	—	—					
70	2	14 0	—	—					
71	1	20 0	—	—					
72	3	14 4	—	—					
75	2	14 0	—	—					
76	1	8 0	—	—					
78	1	12 0	—	—					
	1,052		1,552			445		872	

F L A X.

SCOTLAND.					GRANDHOLM, ABERDEEN.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
7	—	—	2	1 7½	9	1	2 9	2	2 2
8	3	2 6	5	2 1	10	10	2 11	17	2 4½
9	37	2 11¾	33	2 1½	11	26	3 2½	17	3 2½
10	108	2 10	138	2 6½	12	67	3 4½	29	2 4½
11	168	2 11	205	3 1½	13	47	3 11	19	4 4
12	200	3 9	304	3 7					
13	166	3 11½	281	3 5	14	42	4 10	34	4 11¼
14	151	4 4¼	320	4 4½	15	32	5 1	44	5 7½
15	91	4 5½	323	4 11¾	16	30	6 0¾	60	5 8½
16	69	5 3½	363	5 3½	17	20	7 1¾	65	5 10½
17	41	6 4	368	5 7¾	18	16	7 8¼	57	5 8½
18	44	8 1	386	5 6¾					
19	30	8 0	335	5 6	19	10	8 5½	51	5 10¼
20	32	9 10	290	6 0¼	20	10	12 1¼	44	5 8¾
21	22	12 1½	287	6 2	21	8	10 1½	51	6 3½
22	20	10 10	235	5 10	22	2	18 2	43	6 3
23	25	14 8	138	6 4	23	6	11 4	23	5 10¾
24	31	15 0½	141	5 10¾					
25	23	12 6	117	6 0½	24	7	15 3	21	6 0¼
26	39	12 7½	118	5 10	25	2	17 4½	16	7 1¾
27	26	15 0	95	5 7	26	9	15 5½	16	6 4½
28	36	14 6½	91	5 7½	27	7	15 8½	15	6 2
29	20	15 6	54	6 0	28	6	13 7	9	5 8¼
30	35	15 3½	82	5 1¾					
31	21	13 9	24	5 7¾	29	3	19 0¼	7	6 5
32	33	14 7½	33	5 0¾	30	6	15 10	18	5 7
33	32	16 7	36	6 0	31	1	16 7	2	4 10
34	25	18 6	27	5 4½	32	6	15 3¼	3	6 6½
35	37	13 2	24	4 10	33	4	15 4	9	5 10¼
36	29	14 4	35	5 6					
37	27	16 2	17	5 2	34	3	19 6	2	4 9
38	25	11 1	23	4 8½	35	3	14 11¼	—	—
39	26	16 0	22	5 4	36	5	13 2	6	6 6¾
40	24	14 10¾	48	5 4	37	3	17 7	2	7 4
41	19	16 0	10	5 4¼	38	2	15 0	3	6 5
42	22	14 6	19	5 3¾					
43	21	12 9	6	4 6	39	4	26 2	3	6 5
44	25	12 3	4	5 0¾	40	4	15 4	4	4 3¼
45	28	15 3	13	5 5¼	41	2	25 3	3	5 8½
46	21	11 3	6	5 2	42	3	8 7¼	4	6 5
47	20	15 11	7	5 4¾	43	1	9 6	3	4 4½
48	16	17 0	7	5 6					
49	14	13 3	4	5 3¾	44	3	16 9	—	—
50	31	12 1	12	4 10¼	45	1	10 7	2	6 2
51	12	16 8	6	5 8	46	1	21 4	—	—
52	5	19 9	7	4 4	47	—	—	1	6 4
53	9	12 1	6	5 4	48	3	17 2	1	7 5
54	15	13 10½	6	9 10¾					
55	10	9 1	6	4 10	49	2	10 6	2	5 10½
56	16	14 5	1	16 0	50	4	12 4	3	4 5½
57	5	9 7	2	4 0	51	1	9 6	—	—
58	17	14 11	2	4 1½	52	1	6 0	—	—
59	3	11 4	2	3 9	53	—	—	1	5 0
60	7	19 6	7	5 6					
61	5	11 9	—	—	54	2	15 6	—	—
62	3	5 6	1	5 0	55	1	14 0	—	—
63	5	10 3	1	5 0	56	4	13 8¼	—	—
64	7	12 3	2	4 4½	58	1	13 0	—	—
65	2	5 9	1	4 6	60	—	—	2	4 7½
66	5	14 5	1	4 0					
67	5	7 11	1	4 6	62	1	9 0	—	—
68	1	5 0	1	4 6	64	1	8 0	—	—
69	1	8 0	1	3 0	66	—	—	1	4 0
70	1	9 0	2	3 6	67	1	10 0	—	—
71	—	—	1	4 6	72	1	12 0	—	—
72	1	12 0	—	—					
73	1	11 0	—	—	76	1	9 0	—	—
75	2	8 0	—	—					
76	1	9 0	—	—					
77	1	7 3	—	—					
78	—	—	1	5 0					
	2,053		5,146			437		715	

FLAX.

BELFAST.					BELFAST — <i>continued.</i>				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
9	2	2 0	1	2 0	28	3	14 8	5	3 11 $\frac{1}{4}$
10	6	2 2	9	1 10 $\frac{1}{2}$	29	—	—	1	5 0
11	13	2 3 $\frac{1}{2}$	19	2 3	30	3	9 10	1	5 0
12	20	2 0 $\frac{1}{2}$	30	2 6	31	1	10 0	—	—
13	25	2 6	43	2 6	32	1	11 6	1	5 0
14	22	3 3	59	2 10 $\frac{3}{4}$	33	1	19 0	—	—
15	16	3 5 $\frac{1}{4}$	46	3 5	34	2	12 6	—	—
16	6	3 9	44	3 7	35	2	18 0	—	—
17	3	5 6	35	3 11	36	2	14 0	—	—
18	2	6 6	34	4 2	37	1	8 6	—	—
19	—	—	27	4 3 $\frac{3}{4}$	40	4	11 6	1	5 6
20	2	7 0	23	4 6 $\frac{1}{2}$	41	1	20 0	1	4 3
21	2	12 0	7	4 5	42	2	14 0	—	—
22	4	11 3	13	4 3	43	2	9 0	—	—
23	3	16 10	6	4 7	44	3	15 0	—	—
24	3	18 8	1	4 6	46	1	8 0	—	—
25	7	14 11	4	4 3 $\frac{3}{4}$	51	1	33 0	—	—
26	2	13 3	1	4 6	67	1	9 0	—	—
27	4	17 0	—	—					
						173		412	

SILK.

DERBY.					DERBY — <i>continued.</i>				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
7	2	1 8	1	1 6	43	3	25 0	8	5 6 $\frac{3}{4}$
8	11	1 6 $\frac{1}{2}$	14	1 4 $\frac{1}{4}$	44	4	36 6	15	5 4 $\frac{3}{4}$
9	28	1 10	45	1 8 $\frac{1}{4}$	45	1	22 0	8	5 0 $\frac{1}{4}$
10	64	1 10 $\frac{1}{2}$	86	3 1 $\frac{1}{4}$	46	5	19 7	8	6 9 $\frac{1}{2}$
11	66	2 5 $\frac{3}{4}$	87	3 2 $\frac{1}{4}$	47	2	12 0	5	5 1
12	85	2 7	84	3 2	48	3	17 4	7	4 8 $\frac{1}{2}$
13	61	2 11	82	3 4 $\frac{1}{2}$	49	2	22 0	5	4 8 $\frac{1}{4}$
14	68	3 3 $\frac{1}{2}$	98	3 5 $\frac{1}{4}$	50	6	17 4	9	5 6 $\frac{3}{4}$
15	32	8 0	98	4 6	51	5	16 6	5	5 1
16	45	7 9	96	5 4	52	1	13 0	11	5 11
17	38	9 0	95	5 7 $\frac{1}{2}$	53	3	45 0	4	5 0
18	32	10 8	96	6 2	54	3	18 0	5	4 0
19	23	15 4 $\frac{1}{2}$	89	6 0	55	—	—	6	5 7
20	31	16 9	74	6 4 $\frac{1}{2}$	56	2	13 0	4	5 3
21	28	15 4	71	6 6 $\frac{1}{4}$	57	3	13 8	6	6 2
22	25	15 6 $\frac{3}{4}$	46	6 9 $\frac{1}{2}$	58	2	15 6	3	6 4
23	22	17 10 $\frac{1}{2}$	49	7 5 $\frac{1}{2}$	59	2	13 0	3	5 10
24	14	19 11	30	7 0	60	2	11 6	5	5 1
25	20	21 10	31	7 5 $\frac{1}{4}$	61	2	9 0	2	4 0
26	13	16 1	26	7 0 $\frac{3}{4}$	62	1	14 0	—	—
27	10	16 9 $\frac{1}{2}$	18	8 3	63	—	—	2	4 9
28	11	20 10 $\frac{1}{2}$	39	6 10	64	1	14 0	6	4 10
29	16	18 10 $\frac{1}{2}$	11	8 8	65	1	13 6	4	6 0
30	15	21 7	24	7 1 $\frac{1}{2}$	66	—	—	2	5 3
31	7	14 2 $\frac{1}{2}$	10	5 8 $\frac{1}{2}$	67	—	—	4	4 6
32	19	19 2	16	6 5 $\frac{1}{4}$	68	—	—	4	4 9
33	17	32 6 $\frac{3}{4}$	9	8 0	69	1	11 0	2	5 0
34	15	22 1 $\frac{1}{2}$	10	8 0 $\frac{1}{2}$	70	4	14 9	1	5 6
35	14	30 10 $\frac{1}{2}$	6	7 0 $\frac{1}{2}$	71	2	17 6	1	6 0
36	5	21 10	8	6 1 $\frac{1}{2}$	72	—	—	3	6 0
37	7	31 7	11	6 11 $\frac{1}{4}$	73	—	—	1	5 0
38	9	18 0	10	6 1 $\frac{1}{2}$	74	—	—	1	2 0
39	3	36 4	11	6 0 $\frac{3}{4}$	75	—	—	1	3 0
40	6	18 9	16	5 10	78	—	—	3	4 6
41	6	32 7 $\frac{1}{4}$	5	5 1 $\frac{1}{2}$	84	—	—	1	5 0
42	10	33 6	2	5 9					
						939		1,659	

S I L K.

NORFOLK, SUFFOLK, and ESSEX.					SOMERSETSHIRE.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
7	—	—	4	1 6	6	12	0 6	5	0 6 $\frac{1}{4}$
8	—	—	30	1 6	7	3	0 9	5	0 10 $\frac{1}{4}$
9	5	1 7	77	1 8 $\frac{3}{4}$	8	7	0 10 $\frac{1}{4}$	14	0 11 $\frac{1}{2}$
10	7	1 11	125	1 10 $\frac{1}{2}$	9	16	0 10 $\frac{1}{2}$	22	1 2
11	8	1 9	148	2 1	10	22	1 2	25	1 3
12	7	2 2 $\frac{1}{2}$	183	2 3 $\frac{1}{2}$	11	19	1 2 $\frac{1}{4}$	28	1 6 $\frac{1}{4}$
13	4	2 6	152	2 5 $\frac{1}{2}$	12	10	1 6 $\frac{1}{2}$	45	1 11
14	6	3 0 $\frac{1}{2}$	122	2 11 $\frac{1}{4}$	13	7	1 9 $\frac{1}{4}$	26	2 9 $\frac{1}{2}$
15	—	—	128	3 1	14	11	2 4 $\frac{1}{2}$	30	2 6 $\frac{3}{4}$
16	2	4 0	114	3 6 $\frac{1}{4}$	15	10	3 5	31	3 9
17	—	—	117	4 0	16	5	3 2	31	4 3
18	—	—	120	3 10 $\frac{1}{4}$	17	2	7 3	37	4 2
19	—	—	89	4 3 $\frac{1}{2}$	18	2	6 6	27	3 9 $\frac{3}{4}$
20	—	—	40	4 7 $\frac{1}{2}$	19	2	7 6	38	5 1
21	1	21 0	50	4 6 $\frac{1}{4}$	20	2	9 3	37	5 1
22	—	—	21	4 10	21	1	10 6	22	5 4
23	2	16 6	28	5 1	22	1	7 0	26	5 0 $\frac{1}{4}$
24	1	10 0	18	4 11	23	2	6 9	15	5 3
25	—	—	14	5 7	24	1	7 0	23	4 11
26	1	18 0	7	5 7	25	1	10 0	17	5 5 $\frac{1}{2}$
27	1	13 6	6	4 6	26	1	11 0	8	5 2 $\frac{1}{2}$
28	—	—	5	4 10	27	—	—	8	4 9
29	1	31 6	3	4 5	28	1	6 0	5	4 10 $\frac{1}{2}$
30	—	—	6	5 2 $\frac{1}{2}$	29	1	10 6	10	6 3
32	1	24 0	—	—	30	—	—	6	4 4 $\frac{1}{2}$
33	2	18 0	1	4 4 $\frac{1}{2}$	31	—	—	1	7 0
34	—	—	—	—	32	1	11 0	3	6 0
35	—	—	2	4 3	33	2	12 0	2	5 0
36	—	—	1	4 3	34	—	—	2	6 6
37	1	20 0	1	6 0	35	1	7 6	3	5 4
38	1	16 0	—	—	36	—	—	7	7 0
39	1	20 0	—	—	37	—	—	3	7 0
40	—	—	1	9 0	38	1	11 0	2	4 6
43	—	—	1	6 0	39	—	—	4	6 0 $\frac{3}{4}$
44	1	18 0	1	12 0	41	2	10 3	—	—
46	1	21 0	2	9 6	42	2	9 0	2	6 9
50	—	—	1	10 0	43	—	—	1	3 9
56	1	15 0	—	—	45	—	—	1	4 0
					47	—	—	1	7 0
					48	1	18 0	3	3 7
					50	—	—	2	7 0
					51	1	6 0	—	—
					59	1	5 0	—	—
					60	—	—	1	5 6
					62	1	10 0	1	3 6
					70	—	—	1	6 1
					73	—	—	1	5 0
	55		161			142		582	

FACTORY COMMISSION:

SILK.

PAISLEY.									
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
9	—	—	2	2 1½	30	—	—	2	7 0
10	—	—	11	2 5¾	32	—	—	1	8 0
11	—	—	20	2 11¼	33	—	—	3	7 11
12	—	—	16	3 4	34	—	—	3	7 2
13	1	3 6	26	3 10	35	1	21 0	—	—
14	—	—	24	4 1	36	—	—	5	6 6½
15	—	—	42	4 5¼	37	1	10 0	—	—
16	1	5 6	30	5 1½	39	—	—	1	7 0
17	2	7 3	43	4 4½	40	2	16 9	—	—
18	—	—	27	6 1	41	1	18 0	—	—
19	2	10 0	19	5 9	44	—	—	2	6 0
20	1	18 0	15	6 3	45	—	—	2	7 6
21	—	—	9	6 8	60	1	27 6	—	—
22	3	9 10	3	7 0	61	2	14 6	—	—
23	—	—	1	8 6	62	1	8 0	—	—
24	5	16 0	3	7 0	64	1	10 0	—	—
25	1	25 0	6	7 7	79	1	6 0	—	—
26	—	—	7	6 9½					
27	1	12 0	6	6 8½					
28	—	—	5	6 7½		28		334	

POTTERIES.

STAFFORDSHIRE.

		s. d.		s. d.			s. d.		s. d.
7	1	1 6	—	—	37	11	21 9	1	9 0
8	5	1 3	2	0 9	38	11	19 10	3	5 6
9	8	1 6	3	1 2	39	11	20 6	1	8 0
10	21	1 10¼	8	1 3¾	40	15	21 2	—	—
11	9	1 10	9	1 7¾	41	3	31 0	1	9 0
12	26	2 4	21	1 10¼	42	7	24 3	2	8 6
13	24	2 6	27	2 0¾	43	6	17 0	1	10 0
14	53	3 7¼	24	2 3¾	44	11	21 0	2	6 6
15	36	3 11	24	3 0¾	45	11	19 1	1	5 0
16	41	3 9	24	3 10¼	46	7	20 8	1	8 0
17	34	5 6¾	27	4 4¾	47	6	23 2	—	—
18	22	8 10	36	6 4¾	48	4	25 3	—	—
19	20	10 10	34	6 7¼	49	3	24 8	—	—
20	20	13 9	25	7 2	50	2	51 0	—	—
21	24	15 1½	19	7 3¼	51	4	18 0	1	6 0
22	20	14 2	15	8 1	52	2	15 0	1	6 0
23	14	16 4	12	8 2	53	3	21 0	—	—
24	26	15 11	19	7 7½	54	3	13 4	—	—
25	13	19 6	7	9 1	56	3	16 8	—	—
26	19	16 8¼	12	7 3	57	3	19 0	—	—
27	19	16 2½	1	4 0	58	2	19 6	1	7 0
28	15	17 1	7	6 8½	59	1	15 0	—	—
29	17	17 10¾	6	8 2	60	1	14 0	—	—
30	25	18 10¼	8	7 4½	61	1	39 0	—	—
31	19	19 3	4	5 9	62	1	12 0	—	—
32	10	20 0	6	7 3	63	1	10 0	—	—
33	10	17 7	5	4 7¼	66	3	15 4	—	—
34	6	22 8	6	8 2	70	1	45 0	—	—
35	12	21 7	4	8 3					
36	14	22 5	2	7 0		720		413	

L A C E.

DERBY.					TIVERTON, DEVONSHIRE.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
8	—	—	1	1 6	9	5	1 10 $\frac{3}{4}$	—	—
9	4	2 0 $\frac{3}{4}$	2	2 6	10	32	1 10	7	2 1 $\frac{3}{4}$
10	5	2 5	24	2 6 $\frac{1}{4}$	11	27	1 11 $\frac{3}{4}$	3	2 1
11	13	2 11 $\frac{1}{4}$	11	2 10 $\frac{3}{4}$	12	17	2 1 $\frac{1}{2}$	4	2 3 $\frac{3}{4}$
12	8	2 5	18	3 0 $\frac{1}{2}$	13	26	2 5 $\frac{1}{4}$	19	2 8
13	12	4 0 $\frac{1}{4}$	14	4 3 $\frac{1}{2}$	14	23	2 7 $\frac{1}{2}$	17	2 9 $\frac{3}{4}$
14	16	4 8	19	5 4 $\frac{1}{2}$	15	24	3 8	18	3 4
15	14	6 2	18	6 8 $\frac{3}{4}$	16	21	4 5 $\frac{3}{4}$	14	4 0
16	14	6 11 $\frac{1}{2}$	25	7 4 $\frac{3}{4}$	17	10	6 2 $\frac{3}{4}$	17	4 7
17	14	9 10 $\frac{3}{4}$	14	7 11 $\frac{1}{4}$	18	13	7 3	21	4 9
18	5	8 3 $\frac{1}{4}$	14	8 6	19	10	10 7 $\frac{1}{4}$	32	4 11
19	3	9 6	14	7 5 $\frac{1}{2}$	20	13	9 10	29	5 0
20	2	12 6	11	7 3 $\frac{3}{4}$	21	10	12 0 $\frac{1}{4}$	28	4 11
21	4	21 9	11	8 10 $\frac{3}{4}$	22	10	14 5 $\frac{1}{4}$	28	4 10 $\frac{1}{2}$
22	4	17 6	11	7 10	23	3	16 2	20	5 0 $\frac{3}{4}$
23	5	22 2	4	8 9	24	7	17 4 $\frac{1}{2}$	8	5 4
24	2	22 0	6	7 5	25	11	16 6	6	5 5 $\frac{1}{4}$
25	3	23 8	3	7 10	26	10	17 3 $\frac{1}{4}$	6	5 2
26	3	21 4	3	7 8	27	9	16 4 $\frac{1}{2}$	7	5 1 $\frac{1}{4}$
27	8	19 9	1	7 6	28	8	18 1 $\frac{3}{4}$	5	4 9
28	6	18 2	3	8 0	29	9	15 5 $\frac{1}{4}$	1	5 0
29	3	19 4	5	7 10	30	12	16 2 $\frac{3}{4}$	8	5 6 $\frac{1}{2}$
30	5	20 9 $\frac{3}{4}$	2	5 0	31	3	14 8	1	5 4
31	1	30 0	—	—	32	12	16 9	2	3 10 $\frac{1}{2}$
32	2	23 0	—	—	33	15	17 6	—	—
33	5	24 9 $\frac{3}{4}$	—	—	34	9	18 8 $\frac{3}{4}$	1	7 6
34	2	16 0	—	—	35	15	13 7	3	5 10 $\frac{1}{2}$
35	4	24 3	1	10 0	36	4	16 0	—	—
36	3	21 8	2	10 0	37	4	15 2 $\frac{1}{2}$	2	5 9 $\frac{1}{2}$
37	2	20 0	—	—	38	12	16 0 $\frac{1}{4}$	5	5 4 $\frac{3}{4}$
38	5	23 5	—	—	39	7	22 11 $\frac{1}{2}$	—	—
40	3	22 0	—	—	40	6	14 9	3	5 11
42	3	24 0	—	—	41	5	16 6	1	2 9
43	2	17 6	—	—	42	10	13 9 $\frac{1}{2}$	3	6 1 $\frac{1}{4}$
44	1	27 0	—	—	43	4	13 3 $\frac{3}{4}$	2	5 4
45	3	19 8	1	7 9	44	6	14 0	3	5 4
46	—	—	1	8 0	45	8	16 3 $\frac{1}{4}$	3	5 1 $\frac{1}{4}$
48	2	20 0	—	—	46	2	23 3	—	—
49	2	17 6	1	14 0	47	5	26 2 $\frac{1}{4}$	—	—
50	2	22 0	1	12 0	48	2	13 3	—	—
51	1	18 0	—	—	49	2	13 3	1	14 0
54	1	10 0	—	—	50	7	17 3	3	6 9 $\frac{1}{4}$
55	2	17 6	—	—	51	3	14 2	—	—
59	2	15 6	—	—	52	1	13 0	—	—
60	3	18 0	—	—	53	6	19 9	—	—
63	1	20 0	—	—	54	3	12 10	1	7 3
					55	4	24 7 $\frac{1}{2}$	—	—
					56	3	16 2	—	—
					57	2	10 0	1	5 0
					58	2	16 3	—	—
					59	1	12 0	—	—
					60	3	13 10	—	—
					64	1	8 0	—	—
					66	3	20 10	—	—
					68	1	12 6	—	—
					71	1	20 0	—	—
					75	1	10 0	—	—
					78	1	9 0	—	—
	205		241			484		333	

FACTORY COMMISSION:

DYEHOUSE.

LEEDS.								
Age.	MALES.		Age.	MALES.		Age.	MALES.	
	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.
		s. d.			s. d.			s. d.
13	2	5 3	27	6	26 0	41	1	16 0
14	8	6 2	28	1	35 0	42	2	25 0
15	7	6 1	29	5	25 10	44	2	27 1 $\frac{1}{2}$
16	9	7 9 $\frac{1}{4}$	30	2	26 6	46	4	22 0
17	8	10 0 $\frac{3}{4}$	31	4	20 9	47	2	24 10
18	10	11 1	32	2	30 6	51	2	25 6
19	3	13 4	33	1	26 0	52	1	26 0
20	8	16 5	34	2	21 0	53	1	16 0
21	9	20 1 $\frac{1}{2}$	35	6	48 2	55	1	10 0
22	7	21 7	36	1	50 0	56	1	30 0
23	5	20 10	37	5	24 8	61	1	15 0
24	8	22 5	38	2	21 0	72	1	12 0
25	10	23 9	39	1	18 0			
26	6	20 3	40	2	19 6		159	

GLASSWORKS.

PORTO BELLO, MIDLOTHIAN.

Age.	Number employed.	Average Weekly Wages.	Age.	Number employed.	Average Weekly Wages.	Age.	Number employed.	Average Weekly Wages.
		s. d.			s. d.			s. d.
12	2	5 4	25	3	19 5	40	4	32 10 $\frac{1}{2}$
13	8	5 4 $\frac{1}{2}$	26	1	24 0	41	2	36 3
14	8	4 9	27	3	23 0	42	2	14 6
15	3	4 6 $\frac{1}{2}$	28	2	27 9	43	1	19 0
16	2	8 10	29	3	28 8	45	2	21 0
17	2	7 0	30	3	23 2	46	1	22 0
18	5	9 4	31	1	16 0	48	1	10 0
19	6	9 1	32	5	21 5	50	2	13 0
20	2	15 1	34	1	6 0	51	1	8 0
21	4	16 11 $\frac{1}{4}$	35	4	19 3	54	1	25 0
22	1	19 10	36	1	12 0	60	1	9 0
23	5	18 2	38	2	28 3	66	1	16 0
24	5	25 1	39	1	16 0			
							102	

PAPER.

ABERDEENSHIRE.

Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
14	—	—	2	4 0	38	2	11 0	—	—
15	—	—	4	4 7	39	2	18 6	3	4 8
16	—	—	7	4 7	40	2	13 0	—	—
17	—	—	1	5 0	41	2	10 0	2	5 9
18	—	—	2	4 7 $\frac{1}{2}$	42	2	13 6	—	—
19	—	—	2	4 7 $\frac{1}{2}$	43	—	—	1	6 0
20	—	—	5	5 1	44	1	13 6	—	—
21	1	13 6	3	5 6 $\frac{1}{4}$	47	1	13 6	1	5 0
22	—	—	3	4 10	49	2	13 0	—	—
23	1	15 0	2	5 6	52	1	10 0	—	—
24	1	11 0	3	5 9 $\frac{1}{2}$	53	3	11 4	—	—
25	1	10 0	3	5 2 $\frac{3}{4}$	54	1	13 6	—	—
27	1	14 0	—	—	55	1	12 0	—	—
28	1	13 6	—	—	57	1	12 0	—	—
29	2	12 6	1	4 9	60	1	10 0	—	—
30	1	15 0	—	—	61	1	8 0	—	—
31	2	11 9	—	—	62	1	10 0	—	—
32	1	11 0	2	6 4	67	2	8 6	—	—
33	1	10 0	2	4 6	69	1	10 0	—	—
34	1	12 0	2	5 0	73	1	10 0	—	—
35	1	15 0	—	—					
36	2	25 0	1	5 0		45		52	

ABRIDGED TABLES.

To render the preceding Tables more easy to be consulted, they have been abridged into Periods of Five Years each. The First Period comprehends the Operatives under Eleven Years complete; the Second Period comprehends the Operatives from the End of the Eleventh Year complete to the End of the Sixteenth Year complete; the Third Period comprehends the Operatives from the End of the Sixteenth Year complete to the End of the Twenty-first Year complete. These Three Periods together comprehend the Operatives under Age. The next Period is from the End of the Twenty-first Year complete to the End of the Twenty-sixth Year complete, and so on. The Average of the Weekly Wages for each Period is formed by taking from the preceding Tables the Average Weekly Wages of One Operative at every Year, and dividing the Sum by Five.

COTTON.

LANCASHIRE.					GLASGOW.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
Below 11	246	2 3 $\frac{1}{2}$	155	2 4 $\frac{3}{4}$	Below 11	283	1 11 $\frac{3}{4}$	256	1 10 $\frac{1}{4}$
From 11 to 16	1,169	4 1 $\frac{3}{4}$	1,123	4 3	From 11 to 16	1,519	4 7	2,162	3 8 $\frac{3}{4}$
— 16 to 21	736	10 2 $\frac{1}{2}$	1,240	7 3 $\frac{1}{2}$	— 16 to 21	881	9 7	2,452	6 2
— 21 to 26	612	17 2 $\frac{1}{2}$	780	8 5	— 21 to 26	541	18 6	1,252	7 2 $\frac{1}{4}$
— 26 to 31	355	20 4 $\frac{1}{2}$	295	8 7 $\frac{3}{4}$	— 26 to 31	358	19 11 $\frac{1}{4}$	674	7 1
— 31 to 36	215	22 8 $\frac{1}{2}$	100	8 9 $\frac{1}{2}$	— 31 to 36	331	20 9	255	7 4 $\frac{1}{2}$
— 36 to 41	168	21 7 $\frac{1}{4}$	81	9 8 $\frac{1}{4}$	— 36 to 41	279	19 8 $\frac{1}{2}$	218	6 7 $\frac{3}{4}$
— 41 to 46	98	20 3 $\frac{1}{2}$	38	9 3 $\frac{1}{2}$	— 41 to 46	159	19 6	92	6 6
— 46 to 51	88	16 7 $\frac{1}{4}$	23	8 10	— 46 to 51	117	19 2	41	6 10
— 51 to 56	41	16 4	4	8 4 $\frac{1}{2}$	— 51 to 56	69	17 9 $\frac{3}{4}$	18	6 1 $\frac{1}{2}$
— 56 to 61	28	13 6 $\frac{1}{2}$	3	6 4	— 56 to 61	45	16 1 $\frac{1}{4}$	16	6 0
— 61 to 66	8	13 7	1	6 0	— 61 to 66	17	17 7	7	5 5
— 66 to 71	4	10 10	1	6 0	— 66 to 71	15	15 9 $\frac{1}{2}$	2	4 0
— 71 to 76	1	18 0	—	—	— 71 to 76	11	10 11	—	—
— 76 to 81	1	8 8	—	—	— 76 to 81	5	9 6	—	—
	3,770		3,844		— 81 to 86	—	—	—	—
					— 86 to 91	1	8 0	—	—
						4,631		7,445	

ABERDEEN.					BELFAST.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
Below 11	—	—	22	1 9 $\frac{1}{2}$	Below 11	4	1 9	6	1 6 $\frac{1}{2}$
From 11 to 16	11	4 1	138	3 2	From 11 to 16	65	3 1 $\frac{1}{2}$	117	2 7 $\frac{1}{4}$
— 16 to 21	4	5 0	134	5 10	— 16 to 21	49	8 4 $\frac{1}{2}$	181	4 6 $\frac{3}{4}$
— 21 to 26	10	13 5 $\frac{1}{2}$	65	6 0	— 21 to 26	22	18 9	90	5 0
— 26 to 31	12	16 5 $\frac{1}{4}$	18	5 11	— 26 to 31	19	19 11 $\frac{1}{2}$	40	4 11 $\frac{1}{2}$
— 31 to 36	7	15 4 $\frac{1}{2}$	2	6 3	— 31 to 36	10	17 9 $\frac{3}{4}$	18	4 11
— 36 to 41	4	17 0	4	5 7 $\frac{1}{2}$	— 36 to 41	10	21 5	3	5 0
— 41 to 46	3	13 0	—	—	— 41 to 46	8	21 5	3	4 4 $\frac{1}{4}$
— 46 to 51	2	13 3	—	—	— 46 to 51	15	17 4 $\frac{3}{4}$	8	4 5 $\frac{1}{4}$
— 51 to 56	1	11 0	—	—	— 51 to 56	4	18 4	2	4 9
— 56 to 61	2	10 0	—	—	— 56 to 61	8	10 11 $\frac{1}{4}$	1	4 6
— 61 to 66	—	—	—	—	— 61 to 66	—	—	1	12 0
— 66 to 71	—	—	—	—	— 66 to 71	2	7 6	—	—
— 71 to 76	—	—	—	—	— 71 to 76	—	—	—	—
— 76 to 81	—	—	—	—	— 76 to 81	1	9 0	—	—
— 81 to 86	—	—	—	—	— 81 to 86	—	—	—	—
	56		383			217		470	

FACTORY COMMISSION:
WOOL.

NORTH OF ENGLAND.					GLOUCESTERSHIRE.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
Below 11	214	2 0	197	2 5	Below 11	134	1 8 $\frac{1}{4}$	75	1 7
From 11 to 16	700	4 4 $\frac{1}{4}$	724	4 6 $\frac{3}{4}$	From 11 to 16	333	3 1 $\frac{1}{4}$	153	2 7 $\frac{1}{4}$
— 16 to 21	475	9 9	559	6 5 $\frac{1}{2}$	— 16 to 21	182	6 9 $\frac{1}{4}$	166	4 6 $\frac{1}{2}$
— 21 to 26	302	19 6 $\frac{3}{4}$	285	7 0	— 21 to 26	116	11 5 $\frac{1}{2}$	79	5 6
— 26 to 31	241	22 5 $\frac{1}{4}$	174	7 4 $\frac{1}{2}$	— 26 to 31	111	12 11 $\frac{3}{4}$	79	5 6 $\frac{3}{4}$
— 31 to 36	251	22 6	85	7 2 $\frac{3}{4}$	— 31 to 36	83	15 3 $\frac{1}{2}$	54	5 8
— 36 to 41	165	22 6 $\frac{1}{4}$	85	7 7	— 36 to 41	70	14 4 $\frac{1}{4}$	50	5 5 $\frac{1}{4}$
— 41 to 46	158	22 0	52	6 10 $\frac{1}{4}$	— 41 to 46	59	13 8	38	5 7
— 46 to 51	118	22 0 $\frac{1}{4}$	28	7 1 $\frac{3}{4}$	— 46 to 51	58	13 2	37	5 6 $\frac{1}{2}$
— 51 to 56	76	21 0 $\frac{3}{4}$	9	7 5 $\frac{1}{4}$	— 51 to 56	35	11 4	13	4 4 $\frac{1}{2}$
— 56 to 61	44	21 11	11	6 3 $\frac{1}{2}$	— 56 to 61	22	16 0	13	5 0
— 61 to 66	32	20 3	3	3 5 $\frac{1}{2}$	— 61 to 66	13	13 8	8	5 0 $\frac{3}{4}$
— 66 to 71	14	16 8 $\frac{1}{2}$	—	—	— 66 to 71	7	10 11	—	—
— 71 to 76	5	15 3	—	—	— 71 to 76	2	11 3	1	1 6
— 76 to 81	—	—	1	7 0	— 76 to 81	4	8 4	1	7 0
— 81 to 86	—	—	—	—					
	2,995		2,113			1,229		767	

WOOL.

SOMERSETSHIRE.					WILTSHIRE.				
		s.	d.			s.	d.		
Below 11	56	2	1 $\frac{1}{2}$	18	2	0		35	2 3
From 11 to 16	132	3	5 $\frac{1}{2}$	62	2	10 $\frac{3}{4}$		135	2 9 $\frac{1}{4}$
— 16 to 21	80	7	10	91	5	1 $\frac{1}{2}$		136	4 9
— 21 to 26	62	14	10 $\frac{3}{4}$	67	6	6		95	6 0 $\frac{1}{4}$
— 26 to 31	53	16	3 $\frac{1}{2}$	35	7	5 $\frac{1}{2}$		86	5 1 $\frac{3}{4}$
— 31 to 36	54	17	10 $\frac{1}{2}$	25	8	1		87	6 11 $\frac{3}{4}$
— 36 to 41	42	19	9 $\frac{1}{4}$	28	6	9		93	6 2
— 41 to 46	41	16	10 $\frac{1}{2}$	21	7	4 $\frac{1}{4}$		44	6 0 $\frac{1}{4}$
— 46 to 51	36	18	0 $\frac{3}{4}$	16	6	11 $\frac{1}{4}$		54	5 9
— 51 to 56	17	14	4 $\frac{1}{2}$	7	7	11		28	5 8 $\frac{3}{4}$
— 56 to 61	11	16	3 $\frac{1}{2}$	5	5	3		20	5 6
— 61 to 66	6	12	2	3	3	3 $\frac{1}{2}$		8	5 3 $\frac{1}{2}$
— 66 to 71	5	12	0	2	5	0		4	5 1 $\frac{1}{2}$
— 71 to 76	1	11	8	1	2	0		1	4 0
— 76 to 81	—	—	—	—	—	—		—	—
	496			381				826	
						1,871			

WOOL.

FLAX.

ABERDEEN.					LEEDS.				
		s.	d.			s.	d.		
Below 11	6	2	6	11	3	4 $\frac{1}{2}$		45	2 9 $\frac{1}{2}$
From 11 to 16	68	4	11	195	3	7		634	4 0
— 16 to 21	27	7	9 $\frac{1}{2}$	183	5	1 $\frac{1}{2}$		596	5 9 $\frac{3}{4}$
— 21 to 26	32	14	5	96	5	7 $\frac{1}{2}$		184	6 4 $\frac{1}{4}$
— 26 to 31	31	14	10	61	5	5		57	6 2
— 31 to 36	24	16	6 $\frac{3}{4}$	19	5	4 $\frac{1}{2}$		14	6 2 $\frac{1}{2}$
— 36 to 41	33	14	10 $\frac{1}{4}$	14	5	6 $\frac{1}{2}$		9	6 3
— 41 to 46	19	13	9 $\frac{1}{2}$	3	5	0		6	6 0
— 46 to 51	21	15	1 $\frac{3}{4}$	10	5	3		4	6 2
— 51 to 56	13	15	2 $\frac{1}{4}$	8	4	11 $\frac{1}{2}$		1	6 0
— 56 to 61	18	12	4 $\frac{1}{2}$	5	4	4 $\frac{1}{2}$		2	6 0
— 61 to 66	4	14	0	—	—	—		—	—
— 66 to 71	5	10	1 $\frac{1}{2}$	1	4	6		—	—
— 71 to 76	3	11	4	2	3	3		—	—
— 76 to 81	1	12	0	—	—	—		—	—
	305			608				1,552	
						1,052			

F L A X.

MARSHALL & Co., LEEDS.					GRANDHOLM, ABERDEEN.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
Below 11	9	s. d. 3 0	13	s. d. 3 0 $\frac{1}{4}$	Below 11	11	s. d. 2 10	19	s. d. 2 3 $\frac{1}{4}$
From 11 to 16	211	4 3	392	4 4	From 11 to 16	214	4 5 $\frac{3}{4}$	143	4 1 $\frac{1}{4}$
— 16 to 21	71	10 1	336	5 9 $\frac{1}{2}$	— 16 to 21	86	8 3 $\frac{1}{2}$	277	5 9 $\frac{1}{2}$
— 21 to 26	24	17 4 $\frac{1}{2}$	96	6 3 $\frac{1}{4}$	— 21 to 26	25	14 0 $\frac{3}{4}$	154	6 4
— 26 to 31	34	23 6	23	6 2 $\frac{1}{2}$	— 26 to 31	31	15 11	65	6 0 $\frac{1}{2}$
— 31 to 36	21	22 0	6	6 3 $\frac{1}{4}$	— 31 to 36	17	16 4	16	5 6
— 36 to 41	20	23 2 $\frac{1}{4}$	3	5 11	— 36 to 41	18	17 5 $\frac{1}{2}$	18	6 2 $\frac{1}{2}$
— 41 to 46	25	22 0 $\frac{1}{2}$	2	6 0	— 41 to 46	10	14 1 $\frac{3}{4}$	12	5 8
— 46 to 51	12	20 1 $\frac{1}{2}$	1	6 6	— 46 to 51	10	15 4	7	6 0 $\frac{1}{2}$
— 51 to 56	3	18 8	—	—	— 51 to 56	5	11 3	1	5 0
— 56 to 61	5	19 8	—	—	— 56 to 61	5	13 4	2	4 7 $\frac{1}{2}$
— 61 to 66	2	21 0	—	—	— 61 to 66	2	8 6	—	—
— 66 to 71	5	16 9	—	—	— 66 to 71	1	10 0	1	4 0
— 71 to 76	3	19 4	—	—	— 71 to 76	1	12 0	—	—
— 76 to 81	—	—	—	—	— 76 to 81	1	9 0	—	—
— 81 to 86	—	—	—	—	— 81 to 86	—	—	—	—
	445		872			437		715	

SCOTLAND.					BELFAST.				
Below 11	148	s. d. 2 9 $\frac{1}{4}$	178	s. d. 2 1	Below 11	8	s. d. 2 1	10	s. d. 1 11 $\frac{1}{2}$
From 11 to 16	776	3 10 $\frac{3}{4}$	1,433	3 10 $\frac{3}{4}$	From 11 to 16	96	2 8 $\frac{1}{2}$	197	2 11
— 16 to 21	216	7 6	1,742	5 6 $\frac{3}{4}$	— 16 to 21	13	5 8 $\frac{1}{4}$	163	4 11
— 21 to 26	121	13 0 $\frac{1}{2}$	918	6 0 $\frac{3}{4}$	— 21 to 26	19	14 9	31	4 6
— 26 to 31	156	14 7	440	5 7 $\frac{3}{4}$	— 26 to 31	12	13 8 $\frac{1}{2}$	8	4 7 $\frac{1}{2}$
— 31 to 36	148	15 3 $\frac{1}{2}$	144	5 4 $\frac{3}{4}$	— 31 to 36	7	14 2 $\frac{1}{2}$	1	5 0
— 36 to 41	131	14 5 $\frac{1}{2}$	145	5 2 $\frac{1}{2}$	— 36 to 41	7	11 4	1	5 6
— 41 to 46	115	14 2	52	5 1 $\frac{1}{2}$	— 41 to 46	8	14 6	1	4 3
— 46 to 51	102	13 10 $\frac{3}{4}$	36	5 9 $\frac{3}{4}$	— 46 to 51	1	8 0	—	—
— 51 to 56	51	14 3 $\frac{1}{2}$	31	6 0	— 51 to 56	1	33 0	—	—
— 56 to 61	48	15 11 $\frac{1}{2}$	14	6 8	— 56 to 61	—	—	—	—
— 61 to 66	22	9 1 $\frac{1}{4}$	5	4 8 $\frac{1}{2}$	— 61 to 66	—	—	—	—
— 66 to 71	13	8 10 $\frac{1}{2}$	6	3 11	— 66 to 71	1	9 0	—	—
— 71 to 76	4	10 4	1	4 6	— 71 to 76	—	—	—	—
— 76 to 81	2	8 1 $\frac{1}{2}$	1	5 0	— 76 to 81	—	—	—	—
— 81 to 86	—	—	—	—		183		412	
	2,053		5,146						

S I L K.					NORFOLK, SUFFOLK, AND ESSEX.				
DERBY.									
Below 11	105	s. d. 1 9	146	s. d. 1 11	Below 11	12	s. d. 1 9	236	s. d. 1 5
From 11 to 16	312	4 11 $\frac{1}{2}$	449	3 6 $\frac{1}{2}$	From 11 to 16	25	1 11	733	2 7
— 16 to 21	169	11 11	450	5 11	— 16 to 21	2	4 0	480	4 0 $\frac{3}{4}$
— 21 to 26	109	18 1 $\frac{1}{4}$	227	7 0 $\frac{1}{2}$	— 21 to 26	4	15 10	131	5 0
— 26 to 31	65	18 10	118	7 7	— 26 to 31	3	21 0	27	4 11
— 31 to 36	72	23 9 $\frac{1}{2}$	51	7 0 $\frac{1}{2}$	— 31 to 36	3	21 0	3	4 4
— 36 to 41	30	25 3 $\frac{1}{2}$	56	6 4 $\frac{1}{2}$	— 36 to 41	3	18 8	3	6 5
— 41 to 46	24	29 11	38	5 4 $\frac{1}{2}$	— 41 to 46	1	10 0	2	9 0
— 46 to 51	18	17 8	34	5 4 $\frac{1}{2}$	— 46 to 51	1	21 0	3	9 9
— 51 to 56	12	18 3 $\frac{1}{2}$	31	5 1 $\frac{1}{2}$	— 51 to 56	—	—	—	—
— 56 to 61	11	13 4	21	5 9	— 56 to 61	1	15 0	—	—
— 61 to 66	5	12 7 $\frac{1}{2}$	14	4 11	— 61 to 66	—	—	—	—
— 66 to 71	5	12 10 $\frac{1}{2}$	13	5 0	— 66 to 71	—	—	—	—
— 71 to 76	2	17 6	7	4 5	— 71 to 76	—	—	—	—
— 76 to 81	—	—	3	4 6	— 76 to 81	—	—	—	—
— 81 to 84	—	—	1	5 0		55		1,618	
	939		1,659						

S I L K.

SOMERSETSHIRE.					PAISLEY.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
Below 11	50	0 10	71	0 10	Below 11	—	—	13	2 3½
From 11 to 16	57	2 0½	160	2 6	From 11 to 16	1	3 6	128	3 8½
— 16 to 21	13	6 9	170	4 10½	— 16 to 21	6	10 2¼	134	5 6
— 21 to 26	6	8 3	103	5 2¼	— 21 to 26	9	16 11½	22	7 4
— 26 to 31	3	10 9	37	5 1	— 26 to 31	1	12 0	20	6 9½
— 31 to 36	4	7 7½	11	5 11½	— 31 to 36	1	21 0	7	7 8¼
— 36 to 41	1	11 0	16	6 0	— 36 to 41	3	13 4½	6	6 9½
— 41 to 46	4	9 7½	4	4 10	— 41 to 46	1	18 0	4	6 9
— 46 to 51	1	18 0	6	5 10¼	— 46 to 51	—	—	—	—
— 51 to 56	1	6 0	—	—	— 51 to 56	—	—	—	—
— 56 to 61	1	5 0	1	5 6	— 56 to 61	1	27 6	—	—
— 61 to 66	1	10 0	1	3 6	— 61 to 66	4	10 10	—	—
— 66 to 71	—	—	1	6 1	— 66 to 71	—	—	—	—
— 71 to 76	—	—	1	5 0	— 71 to 76	—	—	—	—
— 76 to 81	—	—	—	—	— 76 to 81	1	6 0	—	—
	142		582			28		334	

POTTERIES.					DYEHOUSE.				
					LEEDS.				
		s. d.		s. d.			s. d.		
Below 11	35	1 6½	13	1 1	Below 11	—	—		
From 11 to 16	148	2 10	105	2 2	From 11 to 16	17	5 10		
— 16 to 21	137	8 5¾	146	5 8¼	— 16 to 21	38	11 9		
— 22 to 26	97	16 2½	72	8 0½	— 21 to 26	39	21 9		
— 26 to 31	95	17 4	34	6 8½	— 26 to 31	20	20 8½		
— 31 to 36	57	20 2¾	25	6 9¾	— 31 to 36	15	33 3½		
— 36 to 41	62	21 1½	7	7 4½	— 36 to 41	11	26 7¾		
— 41 to 46	38	22 5½	7	7 9¾	— 41 to 46	5	22 8½		
— 46 to 51	22	28 11½	1	8 0	— 46 to 51	6	23 5		
— 51 to 56	12	16 10	2	6 0	— 51 to 56	5	19 4½		
— 56 to 61	10	16 10	1	7 0	— 56 to 61	1	10 0		
— 61 to 66	3	20 4	—	—	— 61 to 66	1	30 0		
— 66 to 71	4	30 2	—	—	— 66 to 71	—	—		
— 71 to 76	—	—	—	—	— 71 to 76	1	15 0		
— 76 to 81	—	—	—	—	— 76 to 81	—	—		
	720		413		— 81 to 86	—	—		
						159			

L A C E.

DERBY.					DEVONSHIRE.				
		s. d.		s. d.			s. d.		s. d.
Below 11	9	2 2¾	27	2 2	Below 11	37	1 10¼	7	2 1¾
From 11 to 16	63	4 0½	80	4 5¾	From 11 to 16	117	2 6¾	61	2 7¾
— 16 to 21	38	9 5	78	7 8¾	— 16 to 21	67	7 8¼	113	4 7¾
— 21 to 26	18	21 5	35	8 1¾	— 21 to 26	41	15 3½	90	5 1½
— 26 to 31	25	19 10½	14	7 2¼	— 26 to 31	48	16 8¼	27	5 1¼
— 31 to 36	14	23 4¾	1	10 0	— 31 to 36	54	16 3	7	5 6
— 36 to 41	13	21 9	2	10 0	— 36 to 41	33	16 11¾	10	5 8½
— 41 to 46	9	21 10½	1	7 9	— 41 to 46	33	14 9¼	12	4 11
— 46 to 51	6	19 10	3	11 4	— 46 to 51	18	18 7¾	4	10 4½
— 51 to 56	4	15 2	1	12 0	— 51 to 56	17	16 10½	1	7 3
— 56 to 61	5	16 9	—	—	— 56 to 61	11	13 7¾	1	5 0
— 61 to 66	1	20 0	—	—	— 61 to 66	1	8 0	—	—
					— 66 to 71	4	16 8	—	—
					— 71 to 76	2	15 0	—	—
					— 76 to 81	1	9 0	—	—

GLASS WORKS.

PAPER.

PORTO BELLO, MID LOTHIAN.					ABERDEENSHIRE.				
Age.	MALES.		FEMALES.		Age.	MALES.		FEMALES.	
	Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.		Number employed.	Average Weekly Wages.	Number employed.	Average Weekly Wages.
		s. d.		s. d.			s. d.		s. d.
Below 11	—	—	—	—	Below 11	—	—	—	—
From 11 to 16	21	5 0	—	—	From 11 to 16	—	—	6	4 3½
— 16 to 21	17	9 11½	—	—	— 16 to 21	—	—	17	4 9½
— 21 to 26	18	17 10½	—	—	— 21 to 26	4	12 4½	14	5 4½
— 26 to 31	12	28 3½	—	—	— 26 to 31	5	13 9	1	4 9
— 31 to 36	11	13 2	—	—	— 31 to 36	6	14 11¼	6	5 3¼
— 36 to 41	8	22 3½	—	—	— 36 to 41	8	16 9	4	4 10
— 41 to 46	7	24 9	—	—	— 41 to 46	5	12 4	3	5 10½
— 46 to 51	4	15 0	—	—	— 46 to 51	3	13 3	1	5 0
— 51 to 56	2	16 6	—	—	— 51 to 56	6	11 8½	—	—
— 56 to 61	1	9 0	—	—	— 56 to 61	2	11 0	—	—
— 61 to 66	—	—	—	—	— 61 to 66	2	9 0	—	—
— 66 to 71	1	16 0	—	—	— 66 to 71	3	9 3	—	—
— 71 to 76	—	—	—	—	— 71 to 76	1	10 0	—	—
— 76 to 81	—	—	—	—	— 76 to 81	—	—	—	—
— 81 to 86	—	—	—	—	— 81 to 86	—	—	—	—
	102					45		54	

Having been instructed by you to make such observations on the tables as might appear to me relevant to the objects of the Commission, I now proceed to discharge this part of my duty.

1.—I invite the attention of the Central Board to the fact, that the returns and the tables formed from them show that some children are employed under ten years of age, some under nine years of age, and some under eight years of age, and also some under seven years of age; and that some of the latter-mentioned age work for as little as sixpence a week, and that several of seven and eight years complete work for wages less than a shilling a week. I have heard it stated, that in such instances the children are employed in the same rooms with their parents, and that their work requires little bodily exertion; and such allegations may possibly be true, but they do not remove the objection to children so young being shut up within the walls of a factory, and for such a trivial recompence, wholly losing the time which ought to be bestowed on their education.

2.—We may notice the relative numbers between the sexes engaged in the different branches of manufacture and in the same branch of manufacture in different parts of the United Kingdom. In the cotton factories in Lancashire the males are to the females as 100 to 102; in the flax factories at Leeds the males are to the females as 100 to 147; in Scotland, in the cotton factories of Glasgow and the neighbouring districts, the males are to the females as 100 to 160; and in the flax factories at Aberdeen, Dundee, and the east coast of Scotland generally, the males are to the females as 100 to 280. The proportion in Scotland is very different from that in England; and if the Scotch manufacturers get the females to work as well as the males, he must derive a great benefit from their labour being much cheaper. The cause of this remarkable difference does not appear, and I am unable to say whether it arises from any difference in the physical condition and superior hardihood and strength of the Scottish women, as seems to be indicated by the reports of Sir David Barry; or whether it be, that from the great number of factories in the west riding of Yorkshire and in Lancashire the same proportion of females cannot be obtained, and the manufacturers are therefore driven to employ a greater proportion of the more expensive labour of the males. In the silk factories in Norfolk, Suffolk, and Essex, there are exceedingly few males employed, as is also the case in Somersetshire and in Scotland. There is a greater number in the factories in Derbyshire, but some parts of the work are different. As to the wool factories, there is uniformly, in Yorkshire, Gloucestershire, Somersetshire, and Wiltshire, a greater number of males than females, there appearing to be more laborious exertions required; but in the woollen manufacture in Scotland a much greater proportion of females is employed than is the case in England, which is

another indication that in physical strength of constitution there is a considerable difference.

3.—The proportion of the number employed at different ages deserves to be pointed out by the Central Board to the Legislature. A glance at the tables will show the immense number in early life, and the exceedingly small number of persons at a more advanced age.

Take, for instance, the table for the cotton factories in Lancashire; out of 3,770 males employed there are 2,151 below twenty-one years complete, or under age, and out of 3,844 females employed there are 2,518 below twenty-one. In the table for the cotton factories at Glasgow and the vicinity, out of 4,631 males are 2,683 below twenty-one, and out of 7,445 females are 4,870 below twenty-one. Nearly the same is the case in all the manufactures. When, therefore, the legislature makes regulations for the operatives who are under age, it is in fact making regulations for the whole of the people employed, as such a large number would be brought within these regulations that the labour of all the rest must necessarily be in conformity with such a vast majority.

4.—By looking at the abridged tables it will at once be seen that the diminution of numbers from a great multitude in early life to a very small number at an advanced age is not caused by disease and death. Such has been confidently alleged, but a bare inspection of the tables will at once dispel the illusion. Take, for instance, the table for the cotton factories in Lancashire; the number of males employed from eleven to sixteen is 1,169, the number employed from sixteen to twenty-one is 736. No one will venture to say that at that period of life, when the mortality is almost the least of all, so great a number have died in five years as to make such a reduction. In the next period of five years the number of males is only 612, and in the five years from twenty-six to thirty-one is only 355.

So also remark the diminution of the number of females. The greatest number is from sixteen to twenty-one, and is 1,240; but in the next period of five years, from twenty-one to twenty-six, it is only 780; which in the next five years is only 295, and in the period from thirty-one to thirty-six is only 100.

So in the table for the cotton factories about Glasgow the greatest number of males employed is from eleven to sixteen, being 1,519, which in the next five years is reduced to 881, and in the five following years to 541, and in the period from twenty-six to thirty-one is only 358; and the females, who from sixteen to twenty-one are in number 2,452, in the next period of five years are only 1,252, and from twenty-six to thirty-one are only 674, and from thirty-one to thirty-six only 251. Such a reduction, if produced by disease and death, would be a greater havoc than is caused by the plague in any country in the world.

An inspection of the tables will at once show what is the real cause of the diminution of the numbers. Take, for example, table for the cotton factories in Lancashire. The wages of the males during the period when there is the greatest number employed from eleven to sixteen are on the average 4s. 1½d. a week; but in the next period of five years, from sixteen to twenty-one, the average rises to 10s. 2½d. a week; of course the manufacturer will have as few at that price as he can, and certainly not for any description of work which may be done by males working at 4s. 1½d., or by females. In the next period of five years, from twenty-one to twenty-six, the average weekly wages are 17s. 2½d. Here is a still stronger motive to discontinue employing males as far as it practically can be done. It will be seen in the subsequent periods the average rises still higher, to 20s. 4½d. and to 22s. 8½d. At such wages only those men will be employed who are necessary to do work requiring great bodily strength, or great skill in some art, craft, or mystery in which they are engaged, or persons employed in offices of trust and confidence. Now as to the females, there is no diminution of numbers between the period of from eleven to sixteen and the period of from sixteen to twenty-one, and for this obvious reason, the wages do not rise in the case of females to more than on the average to 7s. 3¼d., and never much exceed this amount. The greatest number of females is in the period from sixteen to twenty-one, but there is a prodigious diminution immediately after; and who can be at a loss to tell the cause?—it is the period when they marry. This is notorious to all the world; and the few documents furnished to the Commission on this head will tend still further to establish the fact.

It is known by the returns, as well as from the evidence given to the District Commissioners, that very few women work in the factories after marriage. From one of the cotton factories,

factories, Catrine in Ayrshire, there is a return of the number of women who were married out of the factory in the course of the last fifteen years, and it amounted to two hundred and five; this document is given in the Appendix. The greatest number of the marriages take place before the women complete their twenty-sixth year; but a considerable number still take place in the next period of five years, until they arrive at thirty-one; and even in the next five years a few marriages still take place. After thirty-six we do not in any of the tables see any remarkable decrease. If the fact were otherwise than as above stated, the parochial registers would indicate an unusual mortality of males between the ages of sixteen to twenty-one. So also in like manner there would be a prodigious mortality of females, not indeed at the same period, but five years later, from twenty-one to twenty-six; but an inspection of the tables will at once satisfy us, that if we are to search in the registers for the names of these females, it must be in the marriage registers, and not in the registers of the dead.

OBSERVATIONS.

ON WAGES.

1.—The Central Board will observe the small amount of wages of very young children employed. This I consider, not as a matter of regret, but, on the contrary, most satisfactory. There will be the less loss to the parents if they be withdrawn altogether from the factories, and sent to receive education, as they ought to be at that period of life.

2.—The Central Board will observe the high wages of the males as compared with the wages of the females. An inspection of any of the tables will more strongly exhibit this than any verbal statement.

Some persons feel much regret at seeing the wages of females so low, in some cases full grown women averaging under 6s., and comparatively few more than 8s.; but perhaps such persons are wrong; and nature effects her own purposes more wisely and more effectually than could be done by the wisest of men. The low price of female labour makes it the most profitable as well as the most agreeable occupation for a female to superintend her own domestic establishment, and her low wages do not tempt her to abandon the care of her own children. Nature therefore thereby provides that her designs shall not be disappointed.

3.—The different rates of wages paid for the same work in the different districts of the United Kingdom is a subject which deserves the most serious consideration. As there is only one district of England from which returns as to the cotton manufacture are obtained, and only one from which returns as to the flax manufacture are obtained, these two do not afford much opportunity for remark. But in the case of the wool and of silk it is different; and the following summary will bring the different districts into contrast with each other. I shall first give that of the factories employed in wool:—

WOOL:—WAGES OF MALES.

Districts.	Below 11.	11 to 16.	16 to 21.	21 to 26.	26 to 31.	31 to 36.	36 to 41.	41 to 46.	46 to 51.	51 to 56.	56 to 61.	61 to 66.	66 to 71.	71 to 76.	76 to 81.	Poor's Rate per head 1831.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Leeds, &c.	2 0	4 4 $\frac{1}{4}$	9 9	19 6 $\frac{3}{4}$	22 5 $\frac{1}{4}$	22 6	22 6 $\frac{1}{4}$	22 0	22 0 $\frac{1}{4}$	21 0 $\frac{3}{4}$	21 11	20 3	16 8 $\frac{1}{2}$	15 3	—	5 7
Gloucester	1 8 $\frac{1}{4}$	3 1 $\frac{1}{4}$	6 9 $\frac{1}{4}$	11 5 $\frac{1}{2}$	12 11 $\frac{3}{4}$	15 3 $\frac{1}{2}$	14 4 $\frac{1}{4}$	13 8	13 2	11 4	16 0	13 8	10 11	11 3	8 4	8 8
Somerset	2 1 $\frac{1}{2}$	3 5 $\frac{1}{2}$	7 10	14 10 $\frac{3}{4}$	16 3 $\frac{1}{2}$	17 10 $\frac{1}{2}$	19 9	16 10 $\frac{1}{2}$	18 0 $\frac{3}{4}$	14 4 $\frac{1}{2}$	16 3 $\frac{1}{2}$	12 2	12 0	11 8	—	8 9
Wilts -	1 9	2 10 $\frac{3}{4}$	6 4 $\frac{3}{4}$	11 6 $\frac{3}{4}$	13 10 $\frac{1}{2}$	15 5	13 7 $\frac{3}{4}$	14 8	14 10	14 10 $\frac{1}{2}$	12 2	11 2	7 5 $\frac{1}{4}$	6 6	—	16 6
Aberdeen	2 6	4 11	7 9 $\frac{1}{2}$	14 5	14 10	16 6 $\frac{3}{4}$	14 10	13 9 $\frac{1}{2}$	15 1 $\frac{3}{4}$	15 2 $\frac{1}{4}$	12 4 $\frac{1}{2}$	14 0	10 1 $\frac{1}{2}$	11 4	12 0	—

WOOL:—WAGES OF FEMALES.

Districts.	Below 11.	11 to 16.	16 to 21.	21 to 26.	26 to 31.	31 to 36.	36 to 41.	41 to 46.	46 to 51.	51 to 56.	56 to 61.	61 to 66.	66 to 71.	71 to 76.	76 to 81.	Poor's Rate per head 1831.
Leeds -	s. d. 2 5	s. d. 4 6 $\frac{3}{4}$	s. d. 6 5 $\frac{1}{2}$	s. d. 7 0	s. d. 7 4 $\frac{1}{2}$	s. d. 7 2 $\frac{3}{4}$	s. d. 7 7	s. d. 6 10	s. d. 7 1 $\frac{3}{4}$	s. d. 7 5 $\frac{1}{4}$	s. d. 6 3 $\frac{1}{2}$	s. d. 3 5 $\frac{1}{2}$	s. d. —	s. d. —	s. d. 7 0	s. d. 5 7
Gloucester	1 7	2 7 $\frac{1}{4}$	4 6 $\frac{1}{2}$	5 6	5 6 $\frac{3}{4}$	5 8	5 5 $\frac{3}{4}$	5 7	5 6 $\frac{1}{2}$	4 4	5 0	5 0 $\frac{3}{4}$	—	1 6	7 0	8 8
Somerset	2 0	2 10 $\frac{3}{4}$	5 1 $\frac{1}{2}$	6 6	7 5 $\frac{1}{2}$	8 1	6 9	7 4 $\frac{1}{4}$	6 11 $\frac{1}{4}$	7 11	5 3	3 3 $\frac{1}{2}$	5 0	2 0	—	8 9
Wilts -	2 8	2 9 $\frac{1}{4}$	4 9	6 0 $\frac{1}{4}$	5 1 $\frac{3}{4}$	6 11 $\frac{3}{4}$	6 2	6 0 $\frac{1}{2}$	5 9	5 8 $\frac{3}{4}$	5 6	5 3 $\frac{1}{2}$	5 1 $\frac{1}{2}$	4 0	—	16 6
Aberdeen	3 4 $\frac{1}{2}$	3 7	5 1 $\frac{1}{2}$	5 7 $\frac{1}{4}$	5 5	5 4 $\frac{1}{2}$	5 6 $\frac{1}{2}$	5 0	5 3	4 11 $\frac{1}{2}$	4 4 $\frac{1}{2}$	—	4 6	3 3	—	—

As to the silk manufacture, as the wages of very few males have been obtained, it is useless to contrast the different districts; but the wages of the females are as follow:—

SILK:—WAGES OF FEMALES.

Districts.	Below 11.	11 to 16.	16 to 21.	21 to 26.	26 to 31.	31 to 36.	36 to 41.	41 to 46.	46 to 51.	51 to 56.	56 to 61.	61 to 66.	66 to 71.	71 to 76.	76 to 81.	Poor's Rate per head 1831.
Derby -	s. d. 1 11	s. d. 3 6 $\frac{1}{2}$	s. d. 5 11	s. d. 7 0 $\frac{1}{2}$	s. d. 7 7	s. d. 7 0 $\frac{1}{2}$	s. d. 6 4 $\frac{1}{4}$	s. d. 5 4 $\frac{1}{4}$	s. d. 5 4 $\frac{1}{2}$	s. d. 5 1 $\frac{1}{4}$	s. d. 5 9	s. d. 4 11	s. d. 5 0	s. d. 4 5	s. d. 4 6	s. d. 5 7
Norfolk,&c.	1 5	2 7	4 0 $\frac{3}{4}$	5 0	4 11	4 4	6 5	9 0	9 9	—	—	—	—	—	—	15 4
Somerset	0 10	2 6	4 10 $\frac{1}{4}$	5 2 $\frac{1}{4}$	5 1	5 11 $\frac{1}{2}$	6 0	4 10	5 10 $\frac{1}{4}$	—	5 6	3 6	6 1	5 0	—	8 9
Paisley -	2 3 $\frac{1}{4}$	3 8	5 6	7 4	6 9 $\frac{1}{2}$	7 8 $\frac{1}{4}$	6 9 $\frac{1}{4}$	6 9	—	—	—	—	—	—	—	—

We should naturally expect, in a country like Great Britain, where the means of intercourse by land and water are so abundant and so excellent, that the whole commercial community would be so united that there would be but one price of labour as there is but one price of goods; but the above tables show how much it is otherwise; and we are led to consider what can be the cause. That which most readily suggests itself is, the difference of Poor's Rate. To illustrate this observation, I shall extract from the Tables of the Revenue, Population, Commerce, &c. of the United Kingdom, Part I. p. 4, A Statement of the Poor's Rate in the various Counties in which Factories are situated, for the years 1801, 1811, 1821, and 1831:—

AMOUNT expended in support of the Poor per head for every one of the Population in the Counties of Lancaster, York (West Riding), Derby, Stafford, Leicester, Nottingham, Norfolk, Suffolk, Essex, Gloucester, Somerset, and Wilts, being the Counties in which the Factories are situate from which Returns have been obtained, in the Years 1801, 1811, 1821, and 1831.

COUNTIES.	1801.	1811.	1821.	1831.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Lancaster - - -	0 4 4	0 7 4	0 4 8	0 4 4
York (West Riding) - - -	0 6 7	0 10 0	0 6 9	0 5 7
Derby - - -	0 6 9	0 10 1	0 8 2	0 6 7
Stafford - - -	0 6 1	0 8 5	0 7 10	0 6 5
Leicester - - -	0 12 3	0 14 8	0 14 2	0 11 6
Nottingham - - -	0 6 3	0 10 9	0 7 10	0 6 5
Norfolk - - -	0 12 5	0 19 11	0 14 10	0 15 4
Suffolk - - -	0 11 4	0 19 3	0 17 9	0 18 3
Essex - - -	0 12 1	1 4 8	0 17 7	0 17 2
Gloucester - - -	0 8 8	0 11 7	0 9 1	0 8 8
Somerset - - -	0 8 10	0 12 2	0 8 7	0 8 9
Wilts - - -	0 13 10	1 4 2	0 14 8	0 16 6

In regard to Aberdeen and the east coast of Scotland, a compulsory poor's rate is unknown; and at Paisley and the south-west of Scotland the amount raised by a rate for the relief of the poor is very much lower than it is in any part of England. In respect of the wool manufacture, it will be seen that in the West Riding of Yorkshire, where the poor's rate is lower than in any of the other districts of England where wool is manufactured, the wages are the highest; and that in Somersetshire, where the poor's rate is higher than in the West Riding of York, the wages are lower; but they are there much higher than in the neighbouring county of Wiltshire, where the poor's rate is extremely high. The wages of Wiltshire, when contrasted with the wages of Aberdeen, where there is no compulsory relief, are in pecuniary amount lower; and when we take into account the great difference in the command of the necessaries of life which these wages afford in so cheap a country as the North of Scotland, we see that the condition of the Aberdeen operative is much indeed superior.

A similar result is observable in the silk manufacture, for at Derby, where the poor's rate is comparatively low, the wages are the highest; in Somersetshire, where the poor's rate is higher than in Derby, the wages are lower; and in Norfolk, Suffolk, and Essex, where the poor's rate is extremely high, the wages are far lower than in Somerset, and are indeed so low, that, but for such unquestionable evidence as these returns afford, we could scarcely have believed it possible. The contrast with Paisley, in Scotland, where the poor's rate, as compared with any part of England, is exceedingly small, will lead to the same opinion.

There is, however, one result which does not correspond with this theory. The wages in the county of Gloucester, where the poor's rate is not higher than in Somersetshire, are nevertheless lower than in that county. For this anomaly I cannot account, except it be that the wages of Gloucestershire are kept low by its bordering for a long extent of its frontier on Wiltshire, Berkshire, and Oxfordshire, where the poor's rate is very high, and that labour is kept down by an inundation from these counties. Perhaps also the poor's rate in the towns where the factories are situated may be higher than in the county generally. I have been informed also that the manufactures are diminishing there, whilst they are increasing in the North. The wages in the cotton factories of Lancashire are the best in England; and in that county the poor's rate is lower than in any other manufacturing district. The wages at Glasgow and Aberdeen are less in pecuniary amount, but probably, from the difference of expense of living, yield as great or still greater command of all the necessaries of life.

4.—We have a return of the wages from only three factories in Ireland; one flax factory and two cotton factories, situate at Belfast. The wages are lower than in any other of the factories brought under my observation. I merely draw attention to the fact, and make no further observation than that they bear as high a proportion to what are said to be the wages of the agriculturists of Ireland as the wages of the English manufacturers bear to the wages of the agriculturists in England.

I have one observation to make on what will appear, perhaps, an anomaly in the tables themselves. In some instances, and more particularly at the advanced ages at which only very few are employed, the average wages will sometimes appear very high, and sometimes the contrary. Where there is only a very small number, all averages are liable to such irregularity; and in the present case, if it happen that there are a few of any particular age in offices of trust and confidence, the high wages which they receive produces the high average. I felt bound to include every individual, and have made the return in every case as I found it, and did not feel at liberty to make any allowance or deduction on any account whatsoever. It will be observed also, that in some instances the average of wages is unusually low, which arises in a similar manner, where there are only a few at a particular age, and some of them from debility or other causes only earn wages less than usual.

ON EDUCATION.

THE Central Board, with a view to obtain correct information as to the state of education amongst the operatives in the factories, having, in the forms sent out, made columns in which should be entered, one by one, whether the operative could read or not, and write or not, a large body of information has thence been obtained. Most of the factories which made a return as to wages made also a return as to education, but several did not do so. On the other hand, many more factories which did not return an account, one by one, of the wages, have given information as to reading and writing. I have taken an account county by county. The result has been reduced into a very concise form, as may be seen in the following table.

ENGLAND.	NUMBERS, taken from the Returns.				PROPORTION in the Hundred.			
	Read.	Cannot read.	Write.	Cannot write.	Read.	Cannot read.	Write.	Cannot write.
Lancashire - - -	11,393	2,344	5,184	8,553	83	17	38	62
Cheshire - - -	3,092	344	1,630	1,806	90	10	47	53
Yorkshire - - -	9,087	1,616	5,194	5,509	85	15	48	52
Derbyshire - - -	2,490	314	1,200	1,604	88	12	43	57
Staffordshire - - -	3,530	718	2,603	1,645	83	17	61	39
Leicestershire - - -	351	92	174	269	80	20	40	60
Nottinghamshire - - -	948	127	455	616	88	12	43	57
Norfolk, Suffolk, Essex - - -	1,914	433	608	1,739	81	19	26	74
Wiltshire - - -	3,045	527	1,364	2,208	85	15	38	62
Somersetshire - - -	2,040	229	591	1,678	89	11	26	74
Devonshire - - -	755	34	401	386	96	4	51	49
Gloucestershire - - -	4,556	379	1,983	2,952	92	8	40	60
Worcestershire - - -	21	—	16	5	100	—	77	23
Warwickshire - - -	105	15	81	39	88	12	68	32
TOTAL	43,327	7,170	21,488	29,009	86	14	43	57
SCOTLAND.								
Aberdeenshire - - -	4,336	305	2,133	2,508	93	7	46	54
Forfarshire - - -	4,879	237	2,425	2,691	95	5	47	53
Perthshire - - -	1,601	96	1,054	643	94	6	62	38
Fifeshire - - -	1,558	38	862	734	97	3	57	43
Clackmannanshire - - -	213	6	754	65	97	3	70	30
Stirlingshire - - -	795	23	547	271	97	3	66	34
Lanarkshire - - -	7,815	317	4,454	3,678	96	4	54	46
Renfrewshire - - -	5,664	199	3,165	2,698	97	3	54	46
Ayrshire - - -	867	2	594	275	100	—	68	32
Bute - - -	430	4	310	124	99	1	71	39
Mid Lothian - - -	98	3	96	5	97	3	95	5
TOTAL	28,256	1,230	15,794	13,692	96	4	53	47
IRELAND.								
Belfast - - -	1,473	155	725	903	90	10	44	56

The preceding table will of itself suggest sufficient to render much observation unnecessary. It will be gratifying to the friends of education to find, from authentic documents, that so large a proportion of the working classes in the towns and populous districts is able to read, although we are unable to venture to hope for so favourable an account from the small villages and rural districts in England. But even in the towns there is still great room for improvement; and where so many do not read at all, and so very large a proportion is totally unable to write, we may doubt whether the knowledge of reading be generally very perfect; and at all events, of those who do not write, we may reasonably fear that very few are able to read writing, and that there are still fewer who know any thing of accounts, and of the elements of geography, geometry, and drawing. In respect of education, therefore, the working classes in England possess advantages, but greatly inferior to what are enjoyed in many states on the Continent.

In Scotland, in which, ever since the Reformation, education has been a subject of national interest, and where, for a long period, there has been a school establishment co-extensive with the church establishment, there is a greater proportion able to read and write. There is, however, still much room for improvement in that part of the kingdom. The returns from factories in rural districts are quite as favourable as those from the towns, which is attributable to the parochial schools.

The returns from Ireland being only from Belfast, a sea-port town, having great intercourse with England and Scotland, there is not sufficient information to form the basis of any opinions respecting the education in that country generally. As far as regards Belfast itself, the state of education appears equal, if not superior, to that of the towns of England.

ON SAVINGS BANKS AND BENEFIT SOCIETIES.

ONE of the columns in each of the returns issued by the Central Board was for the purpose of having inserted in each several case whether the operative was a depositor in a savings bank, or a subscriber to a benefit society. If such a return had been obtained it would have shown the degree of prudence and forethought existing amongst the manufacturing population. The inquiry, however, has proved a failure; and it is not difficult to account for it, when it is considered that however much the employers and employed have but one interest in the prosperity of any manufacture, there must be an opposition of interests in the division of the gain thence derived: hence there will always be either a secret or an open struggle on the one hand to raise wages, and on the other to depress them. It was natural, therefore, that the operatives in large towns should decline making known that they could afford to deposit money in a savings bank or pay contributions to a society; and in giving a simple negative we must in charity assume that they meant merely to decline affording information, because, from the number of depositors in savings banks and contributors to benefit societies officially returned to Parliament, it is impossible to doubt that a far greater proportion of the manufacturing population have availed themselves of the advantages of these institutions than the returns would show. I have therefore not made any general enumeration on this head of inquiry, and for the reason stated.

ON MARRIED WOMEN.

It is to be lamented that in this country exceedingly little information is possessed relative to many statistical points on which, in a considerable degree, the happiness of society must depend; and that we are in this respect far behind some of the continental nations. Numerous societies have been formed for the relief of the condition of widows and orphans, and for alleviating other calamities, which have failed from the ignorance of the facts on which the rules of the societies were founded. Every actuary to whom the state of any society verging to distress is referred for his consideration, has to lament the uncertainty of the data on which he must proceed; in many instances he is obliged to assume data as the foundation of his calculations, and, if he report faithfully, has so to state; but it necessarily follows, that however accurate may be his subsequent calculations, where the data are assumed, instead of being ascertained facts, the conclusions must necessarily be subject to great uncertainty.

A very large portion of the misery of human life has proceeded from the failure of societies which this description of knowledge would have enabled to stand firm.

A few statistical returns have been made to the Factory Commission respecting married women and their children; and although very few and very limited, (the shortness of time when the District Commissioners were in the country probably not allowing more to be got, and it being difficult to find men capable of giving them,) even the little additional information which they afford is much too important to be lost.

The best of these returns has been made by Mr. Blackwood, surgeon at Catrine in Ayrshire, and it deserves praise on this account, that he has given a return both of persons who have been engaged in factory labour, and of persons who have never been engaged in factory labour, as well, by which means a comparison may be made, there being the particulars relative to 110 women married from the factory of that village, and of 109 who never worked in the factory.

The number of children likely to follow from every marriage is an important fact, not only to every endowment association, and to every society making an allowance on each lying-in, as is the case with nearly all benefit societies, but also in a national point, to all who direct their attention to the probable future progress of population, and the laws which influence this subject. On this head the return from Catrine is valuable. Of the 110 married women who had worked in the factory, and many of them from an early period in life, there were 42 who had attained the age of 45 and upwards, and may be presumed to have passed the period of child-bearing. These women amongst them had borne 316 children, being on the average 7.52 each. Of the 109 women who had never been employed in the factory were 58 who had attained the age of 45 and upwards, and amongst them they had borne 460 children, being on the average 7.92 each. The average of both classes taken together for 100 women is 776 children, being 7.76 or $7\frac{3}{4}$ each.

As we have no account of the children borne by women deceased, or by women who had become widows before the age of forty-five, we are unable to give the average of births to a marriage. But as far as the experience of Catrine goes, we see what is the fecundity of women who have lived in marriage throughout the usual period of child-bearing.

As to how far the number of children depends on the age at which women marry the following table will give all the information which the experience of these 42 and 58 women affords :

Age at the time of Marriage.	Women married from the Factory.			Women not married from the Factory.		
	Number of Women.	Number of Children.	Average.	Number of Women.	Number of Children.	Average.
17	1	12	12	1	11	11
18	1	11	11	6	60	10
19	3	32	$10\frac{2}{3}$	3	30	10
20	4	35	$8\frac{3}{4}$	11	86	$7\frac{9}{11}$
21	3	23	$7\frac{2}{3}$	5	47	$9\frac{2}{5}$
22	2	18	9	7	57	$8\frac{1}{7}$
23	9	83	$9\frac{2}{3}$	6	59	$9\frac{5}{6}$
24	3	22	$7\frac{1}{3}$	4	27	$6\frac{3}{4}$
25	1	7	7	2	13	$6\frac{1}{2}$
26	—	—	—	5	32	$6\frac{2}{5}$
27	4	23	$5\frac{3}{4}$	—	—	—
28	1	6	6	2	13	$6\frac{1}{2}$
29	1	3	3	—	—	—
30	4	16	4	1	8	8
31	—	—	—	1	5	5
32	1	5	5	1	2	2
33	1	9	9	—	—	—
34	2	6	3	—	—	—
35	—	—	—	1	3	3
36	1	5	5	1	3	3
37	—	—	—	—	—	—
38	—	—	—	1	4	4
	42	316	$7\frac{2}{3}$	58	460	$7\frac{5}{8}$

The

The numbers who married at each different age out of the whole 110 and 109 will be seen by the following table:

Age.	Women who worked in Factories.	Women not in Factories.	Age.	Women who worked in Factories.	Women not in Factories.
16	—	3	29	1	2
17	4	4	30	7	2
18	3	14	31	—	1
19	11	7	32	3	2
20	10	13	33	1	—
21	13	12	34	3	—
22	8	9	35	—	2
23	17	8	36	1	1
24	9	9	37	—	—
25	5	5	38	1	1
26	4	9			
27	7	3		110	109
28	2	2			

If the above be classed into periods of five years, the result will be as follows :

16 to 21	28	41
21 to 26	52	43
26 to 31	21	18
31 to 36	7	5
36 to 38	2	2
	110	109

As to the time from child to child of the married women under 45 who have been in factories previously to marriage, and many of them from an early age, we have a return of 68 ; average age $36\frac{3}{8}$; average age at marriage $23\frac{6}{8}$; having borne amongst them in all 356 children, being on the average one for every two years and 24 weeks, or one in every 128 weeks.

Of the married women under 45 who have never been employed in factories there are returns of 51 ; average age $35\frac{4}{5}$; average age at marriage $21\frac{3}{5}$; having amongst them in all 275 children, being on the average one in two years and 31 weeks, or one in 135 weeks.

It would be a most important point for the benefit societies, most of which pay a sum of money at the lying-in of a member's wife, and also for various societies which insure a sum payable on such occasions, if the average period from child to child were ascertained.

In the case of many of these women a return has not been obtained of the number of their children who were dead, and of the number alive ; but as far as it has been obtained, it is as follows :— of the children of women who have been employed in factories are 501 alive and 154 dead ; of the children of women who have not been employed in factories are 521 alive and 167 dead. The proportions are nearly the same, but are a little in favor of the children of women who have been employed in factories.

In addition to the list of married women giving the particulars from which the above results have been formed, there is much additional statistical information respecting Catrine highly deserving attention, as a sample of a well-regulated and flourishing village. It is printed in the Appendix.

Returns from Staffordshire.

Of the forms relative to married women sent out by the Central Board to be filled up, one hundred and forty-five were obtained from the factories in Staffordshire ; but of these fifteen were not sufficiently complete to be of use, so that the result from only one hundred and thirty can be given.

FACTORY COMMISSION:

Of these one hundred and thirty, there were only seventeen of forty-five years of age and upwards, and the number of children borne was ninety-two, being an average of $5\frac{7}{17}$ each. Small as is the experience of only seventeen, it is still, in the present poverty of statistical information, worthy of notice.

Age at time of Marriage.	Number of Women.	Number of Children.	Average.
14	1	1	1
15	1	7	7
16	1	12	12
18	1	7	7
19	2	13	$6\frac{1}{2}$
20	2	13	$6\frac{1}{2}$
21	1	5	5
23	1	9	9
26	1	3	3
27	1	3	3
28	1	9	9
29	2	4	2
30	2	6	3
	17	92	$5\frac{7}{17}$

There is here a remarkable difference from the women of Catrine, and we have to regret that the number is so small as not to afford an average which might safely be assumed as that of the population generally.

The ages at which the whole 130 married may be seen in the following table :

Age at Time of Marriage.	Number of Women.	Age at Time of Marriage.	Number of Women.
13	1	27	3
14	3	28	3
15	2	29	2
16	8	30	2
17	14	31	—
18	15	32	—
19	8	33	3
20	25	34	—
21	10	35	—
22	8	36	—
23	7	37	1
24	8	38	1
25	3		
26	3		130

Classed into periods of five years the result is as follows :

Under 16	-	-	6
16 to 21	-	-	70
21 to 26	-	-	36
26 to 31	-	-	13
31 to 36	-	-	3
After 36	-	-	2

On the experience of the whole of these 130 women, the average period from child to child is 121 weeks, which is less than the average period of the women at Catrine in Ayrshire.

The whole number of children born alive by the 130 women was 438 ; and there were besides 37 still-born. Of the 438 children 291 were still alive and 147 were dead.

Return from Deanston, Perthshire.

THIS return is a list of 67 women of the population of the Deanston cotton-works, who had worked at the factory, and had been married from it. As the ages of the women are not stated, it is not possible to derive much information from this document.

Twenty-three who had been married 16 years and upwards had borne amongst them 170 children, being an average of $7\frac{9}{23}$ each: their fecundity corresponds with that of Catrine.

On the experience of the whole 67, the period from one child to another is 119 weeks, which is less than the experience of any of the preceding. The average number of years which the whole 67 had worked in the factory is $10\frac{4}{67}$ each.

The average number of years which they had been married is $13\frac{1}{67}$; and the average number of children each is $4\frac{3}{67}$, very nearly five.

ON SICKNESS.

THE amount of sickness existing amongst the manufacturing population, as measured by the time which the several operatives were prevented from following their usual occupation, was a subject of the first importance, and immediately connected with the objects of the Commission. On the one hand, it has been alleged that manufacturing labour is exceedingly injurious to health, and, on the other hand, this has been as strenuously denied. To ascertain this point, in the forms issued to the different factories was a column in which should be entered the loss of time experienced by every individual employed during the preceding year. Many of the manufacturers have not filled up this column, and give as the reason, that their books were not kept in such a manner as to enable them to do so. Many manufacturers, however, have made a return, but in most instances they have been obliged to do so from the information given to them by the several operatives themselves.

The instructions issued by the Central Board manifest a strong desire to have collateral inquiries made amongst the population, in the same towns with the manufacturers, not engaged in manufactures, and for this purpose, that a comparison might be made; for it is abundantly obvious that no results respecting one of these classes could lead to any practical conclusion unless they could be compared with results obtained respecting the other. Unhappily, from the shortness of time allowed, the District Commissioners were unable to realize the views of the Central Board.

For the purpose also of obtaining results with which to compare the degree of sickness amongst the manufacturers, applications were made in various quarters, and in some of them with a considerable degree of success.

Every information on the subject of the amount of sickness is peculiarly important in a national point of view. Nearly all the respectable and independent portion of the working classes are united into societies which form a fund for mutual relief in time of sickness, by which the members may be kept from the necessity of seeking parochial aid. The stability of all such societies must depend on their contributions being sufficient to meet the benefits proposed by their rules. In the present state of knowledge on the subject the smallest additional information must be a general good.

The most valuable return obtained was from the East India Company, and it deserves to be the subject of a special report.

State of Health of the Labourers in the Service of the East India Company.

ON application being made to the East India directors for information respecting the state of health of the labourers in their service, it was most courteously entertained, and more particularly by Henry St. George Tucker esq., the chairman of the committee of ware-

houses, under which department the labourers are employed. I have also to acknowledge the kind services of William Simons esq., chief of the buying office. In consequence a return was obtained in the form of a large volume, containing a list of 2,461 labourers employed in the month of April 1823, with a statement of the number of days' illness experienced by these labourers, one by one, year by year, for the ten succeeding years; also the date of every death, and the date when any labourer ceased to be employed by being superannuated and pensioned, dismissed, or by his voluntarily leaving the service of the Company.

The return thus liberally furnished respecting so large a body of men working together in the midst of the metropolis is of inestimable value, as the Company possessed the means of making it with the most precise accuracy. Every labourer put on the sick list from being unable to do his duty is allowed one shilling and sixpence a day, Sundays included; accordingly the amount thus paid to him shows the time of sickness. As every labourer has the advantage gratuitously of medical advice and medicine, and has this sick allowance made to him, he has no motive for not making known his case, as soon as he suspects any illness, to the surgeons paid by the Company, by whose report he is relieved from attendance on his usual duty; and as he is seen every day during his illness, he cannot continue absent longer than his case requires. Further particulars respecting the labourers will be seen in the valuable evidence of Mr. Lewis Leese; and I need only remark, that the policy of the East India Company in regard to the medical treatment of the persons in their employment seems to be as wise as it is humane, and is deserving of imitation by every public body which employs a number of men.

From this return I have calculated a table of the duration of sickness per annum for every age, from 16 to 81. In explanation of the principle adopted, I shall only observe, that every man who continued in the service of the Company for the whole ten years afforded the experience of one man for one year, at ten different years of age; for instance, the man who was 21 in the beginning of 1823, in the year 1824 gave the experience of a man of 22, and in 1825 of a man of 23, and so on.

Age.	Average duration of sickness per annum for every man employed.	Average duration of sickness for every man sick.
	<i>days and decimal parts.</i>	<i>days and decimal parts.</i>
16 to 21	4.02	13.96
21 to 26	5.40	17.22
26 to 31	4.49	20.18
31 to 36	4.55	21.44
36 to 41	5.57	23.84
41 to 46	5.18	22.83
46 to 51	5.43	23.59
51 to 56	6.80	28.61
56 to 61	7.21	28.28
61 to 66	10.24	31.25
66 to 71	9.93	26.89
71 to 76	10.60	29.67
76 to 81	12.67	38.88

If classed into periods of ten years, after the legal age of 21, the result will be as follows:

Age.	Average duration of sickness per man employed.	Average duration of sickness for every man sick.
Under 21	4.02	13.96
21 to 31	4.94	18.70
31 to 41	5.06	22.63
41 to 51	5.31	23.21
51 to 61	7.00	28.60
61 to 71	10.08	29.07
71 to 81	11.63	31.77

During

During the ten years 496 died, and 248 were pensioned as being unable to continue their labour, and 208 left the service or were dismissed. The rate of sickness is taken for these persons down to the period of their death, pension, leaving the service, or dismissal.

When the preceding table is compared with that of the experience of the societies of which an account is given by the Highland Society of Scotland, it will be seen that as far as the age of 41 there is not much difference. From 41 to 51 the above table is rather more favourable. After that age the amount of sickness in the Highland Society's table very much exceeds the preceding; but that is easily accounted for; the preceding table gives only the sickness of persons who were sufficiently well to be continued in the service of the Company, and does not give the amount of sickness of persons who were pensioned as being unfit for labour; whereas the Highland Society's table includes the whole amount of sickness of all the members of the benefit societies up to the age of 70. A great difference also is no doubt produced in favour of the East India Company's labourers, by the men who become weakened by age being put to work requiring less bodily exertion, as is explained in the evidence of Mr. Leese, which is an advantage which men generally cannot obtain. The amount of sickness amongst the pensioners the East India Company possesses no means of knowing, or it would have been furnished, and an account given of it.

A table showing the ages at which the 248 labourers were put on the pension list will be scarcely less interesting than the preceding.

Age in the beginning of 1823.	Number at each age in 1823.	Pensioned in											Total Number pensioned in 10 years.
		1823.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	1833.	
16	2	—	—	—	—	—	—	—	—	—	—	—	—
17	3	—	—	—	—	—	—	—	—	—	—	—	—
18	5	—	—	—	—	—	—	—	—	—	—	—	—
19	21	—	—	—	—	—	—	—	—	—	—	—	—
20	18	—	—	—	—	—	—	—	—	—	—	—	—
21	31	—	—	—	—	—	—	—	1	1	—	—	2
22	33	—	—	—	—	—	—	—	—	—	—	—	—
23	34	—	—	—	—	—	—	—	—	—	—	—	—
24	44	—	—	—	—	—	—	—	—	—	1	—	1
25	48	—	—	—	—	—	—	—	—	—	—	—	—
26	56	—	1	—	—	—	—	—	—	—	—	—	1
27	55	—	1	—	—	—	—	—	—	—	—	—	1
28	67	—	—	—	—	—	—	—	—	—	—	—	—
29	51	—	—	—	—	—	1	—	—	—	—	—	1
30	75	—	1	—	—	—	—	—	—	—	—	—	1
31	85	—	—	—	—	—	—	—	—	—	—	—	—
32	65	—	—	—	—	—	—	—	1	—	—	—	1
33	75	—	1	1	—	—	—	—	—	—	—	—	2
34	96	—	—	—	—	—	1	—	—	—	—	—	1
35	83	1	—	—	—	—	—	—	—	—	—	—	1
36	86	—	—	1	—	—	—	—	1	—	—	—	2
37	88	—	—	3	—	—	—	—	—	1	1	—	5
38	61	1	—	—	—	—	—	—	—	—	—	—	1
39	65	—	—	—	—	—	—	2	—	—	—	—	2
40	58	—	—	—	2	—	—	1	—	—	—	—	3
41	61	—	—	—	—	—	—	—	—	—	—	—	—
42	56	—	—	—	—	—	—	—	—	—	—	—	—
43	66	1	—	—	—	—	—	—	—	1	—	—	2
44	61	—	1	—	—	—	—	—	—	2	—	—	3
45	70	—	—	—	—	—	—	1	1	—	—	—	2
46	44	—	—	—	—	—	1	1	1	—	1	—	4
47	70	—	—	—	—	1	—	—	—	3	3	—	7
48	51	2	1	1	—	—	—	1	—	—	—	1	6
49	62	—	2	—	—	—	1	3	1	—	2	—	9
50	57	—	1	1	—	—	—	—	—	1	1	—	4
51	43	—	1	2	—	—	—	1	—	2	1	—	7
52	49	—	2	1	1	1	1	—	—	—	—	—	6
53	55	—	3	—	1	—	1	2	1	1	2	1	12
54	55	1	1	—	1	3	2	1	1	1	2	—	13
55	41	1	3	1	—	—	—	1	3	1	—	—	10
56	47	2	2	—	2	1	1	4	—	2	1	—	15
57	38	—	1	1	4	1	3	—	2	—	—	—	12
58	43	3	1	1	1	1	1	4	—	1	2	1	16
59	23	—	1	3	1	—	—	1	1	1	2	—	10
60	29	1	3	1	2	—	1	1	1	1	2	—	13

Age in the beginning of 1823.	Number at each age in 1823.	Pensioned in											Total Number pensioned in 10 years.
		1823.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	1833.	
61	13	2	-	-	-	2	1	1	-	-	-	-	6
62	17	1	-	2	3	-	-	2	-	-	-	-	8
63	17	2	1	2	1	-	-	2	-	-	-	-	8
64	12	-	2	-	-	-	-	2	1	1	-	-	6
65	13	1	1	2	-	1	-	-	-	1	-	-	6
66	15	1	2	-	1	1	-	2	1	-	1	-	9
67	11	-	-	1	1	1	2	-	1	-	-	-	6
68	7	1	-	1	-	1	1	-	-	-	1	-	5
69	3	-	1	-	-	-	-	-	-	-	-	-	1
70	11	-	-	-	2	2	1	-	1	1	1	-	8
71	3	1	-	-	-	-	-	-	-	-	-	-	1
72	4	1	-	-	1	-	-	1	-	-	-	-	3
73	1	-	-	-	-	-	-	-	-	-	-	-	-
74	3	-	-	1	-	-	-	-	-	-	-	-	1
75	2	-	1	-	-	-	-	-	-	-	-	-	2
76	1	-	-	-	-	-	-	1	-	-	-	-	-
77	2	-	-	1	1	-	-	-	-	-	-	-	2
	2,461	23	35	28	25	16	19	35	19	22	25	3	248

Of the above 248 it may be ascertained that there were pensioned :

From 27 to 31 years of age	4
31 to 41	— 13
41 to 51	— 16
51 to 61	— 84
61 to 71	— 100
71 to 81	— 30
At 82	— 1
	<u>248</u>

The number of pensioners seems very great, and were such men to be long-lived, they would be a heavy burden on the funds of any society. In order to ascertain the degree of mortality amongst these pensioners, application was made for a return in the beginning of this month, and it was very readily furnished. From this return it appears, that of the preceding number only eighty-six were alive.

Of those pensioned, under	- 31	-	- 2
from 31 to 41	-	- 7	
41 to 51	-	- 6	
51 to 61	-	- 25	
61 to 71	-	- 10	
71 to 81	-	- 35	
At 82	-	- 1	
		<u>86</u>	

Of one of the pensioners, it was not known whether he was alive or not.

The mortality of persons admitted at an early age to pensions is about as great as amongst persons admitted at a more advanced period of life ; which is easily to be accounted for, when we consider that all such must have been suffering from disease, and therefore were quite as likely to be soon cut off as persons who were placed on pensions on account of the natural debility of old age.

Whilst we are bound to view this great mortality with the feelings of men who must before long tread the same path, we may observe, that as far as regards the funds of a benefit society, this mortality shews that the pension list is far less formidable than at first might be expected.

The ages at which the 496 men died whilst in the service of the Company, and at which the 161 pensioners died, will be seen in the following table : —

Age.	Men in the Service.	Pensioners.	Both united.	Age.	Men in the Service.	Pensioners.	Both united.
22	1	—	1	55	11	4	15
23	—	—	—	56	21	6	27
24	2	—	2	57	22	2	24
25	1	—	1	58	11	10	21
26	1	—	1	59	17	4	21
27	1	1	2	60	10	7	17
28	6	—	6	61	17	8	25
29	4	—	4	62	14	11	25
30	4	1	5	63	13	7	20
31	4	—	4	64	7	11	18
32	5	—	5	65	4	4	8
33	9	—	9	66	8	7	15
34	8	—	8	67	12	9	21
35	12	—	12	68	8	7	15
36	10	—	10	69	2	4	6
37	12	—	12	70	1	2	3
38	14	1	15	71	4	4	8
39	8	—	8	72	4	5	9
40	15	1	16	73	2	6	8
41	10	1	11	74	1	3	4
42	13	1	14	75	2	3	5
43	10	—	10	76	—	2	2
44	21	—	21	77	1	2	3
45	15	—	15	78	—	1	1
46	14	1	15	79	1	2	3
47	13	1	14	80	—	3	3
48	12	2	14	81	—	—	—
49	13	1	14	82	—	1	1
50	11	1	12	83	—	—	—
51	14	1	15	84	—	—	—
52	13	2	15	85	—	1	1
53	14	—	14				
54	13	10	23				
					496	161	657

The whole of the evidence of Mr. Leese is so important, that it deserves a place in this Report.

“ LEWIS LEESE jun. Esq. examined.

“ What means have you had of becoming acquainted with the state of health and general condition of the labourers in the service of the Honourable East India Company?—Ever since the year 1808 my father has been one of the two surgeons appointed by the East India Company to their warehouse department, and during the last seventeen years I have assisted my father, taking an active part in the duties.

“ What have been the duties of surgeon in this department?—To examine all writers and labourers nominated for admission into the Company's service, as to their fitness for the duties to be performed by them, to afford medical and surgical aid to the labourers, writers, and assistant elders, and to make general and special reports upon the state of health and condition of the same.

“ Are the surgeons paid by the Company?—Entirely by the Company.

“ Are there any advantages in that arrangement to the labourers, &c., beyond the saving to them of expence?—I consider very great advantages. Upon the slightest symptom of illness, aware that it will subject him to no expence, the labourer or other person goes immediately to the surgeon, in consequence of which it frequently happens that diseases are arrested at their very commencement, and the serious, perhaps fatal, effects consequent upon a full development of the disease prevented. Should the malady be of a trifling nature, the person continues at his employment; but if necessary, he remains at home until capable of resuming his duty, upon the usual allowance granted to his class when ill; and in this latter case he is visited by the surgeon, nor can he again attend his duty until the surgeon give him permission.

" In private practice have you observed that diseases have frequently become serious and dangerous from the delay in obtaining medical advice, which might easily have been prevented but from a dread of incurring expence?—I have frequently observed it, and there cannot be a doubt that the experience of every medical man in extensive practice would prove the same fact. It must be acknowledged that in this great city every facility is afforded for obtaining gratuitous medical aid at our large hospitals and dispensaries; but, strange to say, the greatest repugnance is felt by the poor in applying to them for relief; and it is not until the disease has made destructive ravages by its continuance and progress, or the injurious effects of old women's remedies and quack medicines manifest themselves upon the constitution, that they will seek the benefits held out to them at our charitable institutions.

" Has the East India Company taken any means to be select in the admission of labourers to their service?—The emoluments and regular employment, with advantages in cases of sickness or superannuation, have always been such as to render the situation of a labourer in the Company's service desirable; hence there has always been a much greater number of applicants than could be employed, and the Company has thus been able to select from them such as from health and constitution appeared most efficient, and to decline the rest.

" What means were taken to ascertain the health and constitution of applicants?—The persons seeking the situation were only nominated conditionally, *i. e.* subject to approval by the surgeon on examination. Upon their appearance before the surgeon they undressed, and underwent precisely the same scrutiny as recruits on entering the army.

" So that all persons admitted into the Company's service were such as on examination appeared to be of sound health and constitution?—Uniformly so.

" What motive had the Company for being so particular?—In consequence of the Company embodying as many of their labourers as were required for such duty as soldiers or volunteers, it became necessary to have men fit for military service; also, in case of sickness, the sum of one shilling and sixpence a day being paid to them from a fund guaranteed by the Company; and further, a pension for life, on superannuation, being granted to them;—sickly persons would have been unfit in the first case, and in the two last would have entailed a heavy expence on the Company, which it was desirable to avoid.

" Do you then consider that the East India Company's labourers, as a body of men, will have a better state of health than an equal number of men taken from the journeymen and labourers indiscriminately?—Certainly, at the time of their admission, and for some years afterwards; and although in the course of ten years the case will be different with a great number of them, I still think they will on the whole be found more healthy than an equal number taken indiscriminately, for two or three reasons, about to be named: First, the facility (previously stated) afforded to them of obtaining medical aid without incurring expence or violating any feelings of independence, for, being one of the conditions of their service, it amounts to a claim on their part; secondly, the supply of healthy men being kept up from year to year, according to the demand; and, thirdly, from the careful allotment of duty according to ability; thus the young and powerful are placed to the heavy labour of piling, and trucking, &c.; the older, and infirm from any cause, have apportioned to them the lighter duties, requiring but little exertion of strength,—nailing up chests, sorting various articles of trade, sewing bags, &c. &c. &c.; and many of the old servants of the Company are placed in responsible situations, but involving no labour of body, *viz.*, as messengers, gate-keepers, commodores, &c.; and I should consider that, from this third consideration, the rate of sickness, taken according to the different ages of the Company's servants, will be much more uniform than is found to be the case among the same class of persons indiscriminately taken. A fourth reason may be stated, *viz.*, the strict examination instituted at their admission; and it may reasonably be assumed that medical men appointed by a great public body are superior to many of the practitioners residing in the neighbourhoods inhabited by the poor; and, in addition, they have every motive for doing their duty, and no interest in an opposite direction.

" What is your opinion of the general health of the East India Company's labourers as compared with the members of benefit societies?—That must entirely depend on the regulations of the society as to the admission of members; some societies are much stricter than

others,

others, but generally speaking I should say that the societies were less strict than the East India Company, and that consequently, from this cause, and for the other reasons stated in my answer to the previous question, I think that they enjoy advantages for the preservation of health beyond any other body of men, and therefore, as a body, likely to be more healthy than the rest of society generally.

“Are the labourers who have been put on the pension list all persons who have become unfit for labour?—I have never known any person placed on the pension list except from incapacity for labour.

“What means are taken to ascertain their inability to labour?—A special report from the surgeon on the case is in every instance required to be made to the warehouse committee.

“LEWIS LEESE, jun.”

From the results given above, and the evidence of Mr. Leese, the following consequences appear to be necessarily derived:

1. That from the care taken, at the admission of labourers into the service of the East India Company, to ascertain, by medical examination, that the men were in sound health and of good constitution, the labourers formed a body of men far more select than the men in the factories, and fully as select as any benefit society whatsoever, and far more so than societies generally.

2. That from the labourers being in regular moderately hard employment all the year, and therefore never experiencing the injuries done to the constitution by the vicissitudes of high wages and total want, and enjoying the benefit of gratuitous medical aid, the real amount of sickness experienced would be less than that of persons in factories, and the members generally of benefit societies.

3. That the daily visits of the medical officers of the Company secured the Company against pretended sickness of persons in their employment, which, with the strictest surveillance, cannot effectually be done in most benefit societies.

From these observations it is to be inferred, that the rates of every benefit society, in the most favourable circumstances, must be insufficient for permanent security where they are not such as to afford payment for such a rate of sickness as is indicated in the above result, and payments for funerals and pensions for superannuated members, according to the rules of the society; and there are few societies where the members are so select as not to require heavier contributions than will be required for such a rate of sickness as is indicated by the preceding table.

RETURN FROM CHRIST'S HOSPITAL, LONDON.

WITH a view to obtain the means of comparing the sickness and mortality of children in factories with children under the most favourable circumstances for the preservation of health and longevity, application was made for a Return to the Treasurer of Christ's Hospital.

The application was courteously received, but the books did not furnish the means of readily showing the exact duration of sickness experienced by each child. The following table, showing the degree of mortality, was furnished, and it does infinite honour to the management of this magnificent charity.

FACTORY COMMISSION:

STATEMENT of the Number of Children in Christ's Hospital, and also of the Number of Deaths in each Year, for Twenty Years, from 1813 to 1833.

Number of Children in the Hospital at Easter.					Number of Deaths in each Year, ending Easter.						
YEAR.	LONDON:	HERTFORD:	HERTFORD:	Total.	LONDON: Boys.		HERTFORD: Boys.		HERTFORD: Girls.		Total Deaths.
	Boys.	Boys.	Girls.		In the Hospital.	Absent on leave with their Friends.	In the Hospital.	Absent on leave with their Friends.	In the Hospital.	Absent on leave with their Friends.	
1814	628	324	67	1019	3	1	1	1	0	1	7
1815	607	337	66	1010	4	0	0	0	2	0	6
1816	600	361	70	1031	5	1	6	2	0	0	14
1817	639	326	68	1033	2	4	4	1	0	0	11
1818	601	367	69	1037	3	2	6	2	0	0	13
1819	627	343	68	1038	2	2	4	3	0	1	12
1820	638	348	66	1052	3	1	2	0	0	0	6
1821	632	332	65	1029	4	0	4	1	2	0	11
1822	638	342	66	1046	3	3	0	0	2	1	9
1823	606	355	67	1028	1	2	3	0	0	0	6
1824	595	389	62	1046	3	3	7	0	0	1	14
1825	629	376	65	1070	1	0	3	0	0	0	4
1826	637	388	60	1085	2	5	3	0	0	0	10
1827	642	403	62	1107	4	1	4	0	0	0	9
1828	620	422	62	1104	2	1	0	0	0	0	3
1829	590	451	69	1110	4	3	4	1	0	0	12
1830	666	391	69	1126	1	5	0	1	0	0	7
1831	668	405	72	1145	3	1	1	0	0	0	5
1832	674	416	66	1156	1	2	3	0	1	0	7
1833	671	398	64	1133	0	3	2	0	0	0	5
12,608					51	40	57	12	7	4	171

Average of Deaths in 20 years, 1 in $125\frac{30}{77}$.

During the first 10 years, 1 in $106\frac{33}{55}$; during the last 10 years, 1 in $145\frac{22}{26}$.

N.B.—If the number of children, instead of being taken at Easter, when it is always lower than at any other period of the year, had been taken a month later, it would have been increased by at least 40 in each year; thus reducing the average of deaths for the last 20 years to about 1 in 130.

The above return of the mortality of children between eight and fourteen years of age will appear astonishing, and certainly it is highly creditable to Christ's Hospital.

Mr. Poynder the Treasurer, and the chief clerks in his office, stated to me, that the children received into Christ's Hospital were in no other respect select as to health and constitution, excepting that none were received into the institution who were not at the time of their reception in a sound state of health. We must therefore consider the exceedingly small mortality as arising from general good management, consisting in substantial clothing, plentiful and wholesome food, good lodging, healthful exercise in the hours allowed for recreation, and immediate attention on the first appearance of sickness, under the care of skilful medical men appointed by the Committee.

The establishment at Hertford must greatly contribute to the general good health of the children. It will be observed that the proportion of deaths is greater there than in London, which of course arises from the less vigorous being sent out thither.

RETURNS FROM THE DOCK-YARDS.

WITH a view to ascertain the state of health of the workmen employed in His Majesty's Dock-yards of Woolwich, Sheerness, Chatham, Portsmouth, Devonport, and Pembroke, application was made to the Admiralty, and an order was issued. Returns were accordingly obtained, as follows:—

AN ACCOUNT of the Number of Workmen employed in WOOLWICH YARD, and of the Time of Absence on account of Sickness, during the last Three Years, as directed by Admiralty Order of the 8th instant.

DATE.	Average Number of Persons borne.	Total Number of Days absent for One Man on account of		Number of Men to which it is equal on an Average throughout the Year.			Number who have died in each Year.
		Casual Sickness.	Injuries received in the execution of their Duty.	By casual Sickness.	By Lameness.	Sickness and Lameness together.	
1830	742	2,902	2,897	$7\frac{342}{65}$	$7\frac{342}{65}$	$15\frac{342}{65}$	4
1831	725	4,016	2,286	$11\frac{365}{65}$	$6\frac{92}{65}$	$17\frac{97}{65}$	8
1832	766	3,675	3,411	$10\frac{25}{65}$	$9\frac{26}{65}$	$19\frac{51}{65}$	10

Woolwich Yard, }
14th May 1833. }

T. BROWN.

R. ABECKETT,
for Mast^r Ship^t, absent on duty.

A. KEDDELL.

A RETURN showing the Number of Cases of Absence from Work on account of Sickness, and the Number of Workmen employed in SHEERNESS DOCK YARD, during the last Three Years. Prepared in pursuance of Directions from the Admiralty of the 8th instant.

Name of Disease.	1830.	1831.	1832.
	Number of Cases.	Number of Cases.	Number of Cases.
Intermittent fever - - -	90	75	98
Rheumatism - - -	47	37	58
Gout - - -	5	10	8
Diarrhoea - - -	9	9	23
Cynanche - - -	8	7	8
Dyspepsia - - -	3	—	—
Epilepsia - - -	3	1	—
Boils - - -	3	—	1
Piles - - -	1	4	4
Catarrh - - -	2	1	14
Pneumonia - - -	- - -	1	—
Dysentery - - -	- - -	1	—
Ophthalmia - - -	- - -	1	—
Debility - - -	- - -	2	—
Phlegmon - - -	- - -	1	—
Fever - - -	- - -	7	4
Colic and cholera - - -	- - -	44	24
Hydrocele - - -	- - -	3	—
Consumption - - -	- - -	- - -	2
Hernia humeralis - - -	- - -	- - -	1
Spasms - - -	- - -	- - -	2
	181	204	237
Number of Workmen employed -	470	483	469

Sheerness Yard, }
17th May 1833. }

JAMES WARD,
for Storekeeper, absent on leave.

AN ACCOUNT showing the Average Number of Artificers and Labourers employed in CHATHAM DOCK YARD in the last Three Years; and also the Number of each Description of Trade, &c. who have absented themselves by reason of Sickness during that Period, and the Number of Days they were absent. Per Admiralty Order, 8th May 1833.

Description of Workmen.	1830.			1831.			1832.		
	Average Number borne.	Number sick.	Number of Days absent.	Average Number borne.	Number sick.	Number of Days absent.	Average Number borne.	Number sick.	Number of Days absent.
			For one Man.			For one Man.			For one Man.
Shipwrights - - -	554	288	3,757	526	347	3,981	483	263	2,689
Caulkers - - -	48	12	240	46	32	360	44	27	240
Blacksmiths - - -	99	25	277	96	45	495	86	36	378
Ropemakers - - -	125	75	724	136	88	630	148	69	648
House Carpenters and Joiners - }	95	43	394	91	64	716	78	42	540
Painters - - -	15	8	90	15	5	10	15	4	46
Bricklayers - - -	12	10	68	11	2	18	10	4	103
Sailmakers - - -	23	5	41	23	13	169	23	4	109
Braziers and Plumbers - - -	9	5	83	8	2	19	7	5	135
Millwrights - - -	4	1	2	4	2	33	3	2	18
Riggers - - -	46	21	234	47	28	471	39	20	407
Sawyers - - -	87	41	487	87	39	534	78	45	618
Labourers, Scavellers, and others - }	265	63	988	243	80	1,154	212	74	790
	1,382	597	7,385	1,333	747	8,590	1,226	595	6,721

Chatham Yard, }
13th May 1833. }

D. ROWLAND, Surgeon.
W. P. SMITH, Storekeeper.

An Account of the Number of Workmen employed in PORTSMOUTH DOCK YARD, and of the Cases of Absence from Work on account of Sickness, during the last Three Years. 56
Prepared agreeably to Mem. of 9th May 1833.

FACTORY COMMISSION:

Description of Workmen.	1830.				1831.				1832.			
	Average Number borne.	Number of Cases.		Days sick.	Days hurt.	Average Number borne.	Number of Cases.		Days sick.	Days hurt.	Number of Cases.	
		Sick.	Hurt.				Sick.	Hurt.			Sick.	Hurt.
Blockmakers -	5	3	2	10	13	5	5	1	31	18	2	-
Boys ; house and oakum -	29	8	3	238	37	26	7	3	40	31	5	23
Braziers and tinmen -	3	-	1	-	16	3	-	-	-	-	1	-
Bricklayers and labourers -	29	5	4	158	43	26	5	5	255	46	3	38
Caulkers -	90	30	16	384	236	88	52	12	512	106	27	360
Cooper -	1	-	-	-	-	1	-	-	-	-	-	-
House carpenters -	16	3	-	41	-	16	7	2	104	25	6	-
Joiners -	81	23	6	355	83	80	20	16	157	190	20	164
Labourers ; storehouse -	19	2	1	28	95	17	4	-	22	-	6	-
yard and house carpenters } employed as labourers -	209	50	11	900	279	198	57	21	729	483	44	225
Locksmiths -	2	-	2	-	-	2	1	-	11	-	-	-
Masons -	11	2	-	13	22	11	2	-	3	-	1	44
Messengers -	7	3	-	20	-	7	-	-	-	-	-	-
Painters and glaziers -	29	11	7	198	73	26	14	5	356	94	7	11
Plumbers -	6	6	-	42	-	6	5	-	39	-	2	-
Pitch-heater -	1	-	-	-	-	1	1	-	1	-	-	-
Riggers and labourers -	74	11	11	74	137	71	22	11	162	177	16	162
Sailmakers -	46	15	1	189	10	45	22	2	284	10	20	42
Sawyers -	99	27	31	233	553	96	31	13	357	228	23	124
Scavellers -	64	16	7	292	96	63	14	7	233	115	13	65
Shipwrights -	827	318	196	3,702	3,079	800	410	179	4,729	2,463	315	3,007
Smiths -	153	70	25	900	275	151	117	27	656	296	66	351
Ropemakers -	111	35	-	589	-	107	44	7	381	80	36	85
Warders -	35	17	9	336	111	28	9	1	35	29	11	11
Wheelwrights -	3	-	1	-	13	3	-	-	-	-	-	-
Workmen at wood-mills -	25	9	1	114	32	24	6	-	268	-	2	36
Metal -	52	24	15	162	195	51	26	10	214	99	27	96
Millwright's shop -	52	9	7	210	486	50	7	3	26	130	12	242

Portsmouth Yard, 18th May 1833.

W. PENNELL.

A RETURN of the Average Number of Workmen employed in PLYMOUTH DOCK YARD, and of the Cases of Absence from Work on account of Sickness, during the Three Years ending the 31st December 1831. Prepared in pursuance of Admiralty Order, the 8th ultimo.

The average number employed in the year 1829 - - 2,123
1830 - - 2,044
1831 - - 2,019

Days each Man.	Absent on account of Sickness.			Days each Man.	Absence on account of Sickness.		
	1829.	1830.	1831.		1829.	1830.	1831.
	Men.	Men.	Men.		Men.	Men.	Men.
1	55	42	54	51	2	2	1
2	75	57	88	52	2	1	—
3	91	89	84	53	-	1	2
4	54	38	59	54	1	1	2
5	46	42	51	55	1	1	—
6	65	75	89	56	—	—	—
7	20	16	30	57	-	1	1
8	26	25	32	58	1	1	—
9	15	25	35	59	1	—	—
10	19	22	28	60	1	—	—
11	16	21	19	61	-	-	1
12	16	28	35	62	-	2	—
13	10	2	12	63	1	-	1
14	7	6	19	64	1	—	—
15	17	18	21	65	1	2	1
16	9	11	4	66	-	-	1
17	6	7	8	67	-	-	1
18	12	12	20	68	-	-	2
19	4	5	6	69	—	—	—
20	6	9	5	70	1	—	—
21	6	7	9	71	1	1	—
22	7	9	2	72	2	2	—
23	4	3	4	73	1	1	1
24	8	13	15	74	2	1	—
25	3	2	1	75	-	-	2
26	8	4	4	82	-	-	1
27	3	3	3	86	1	—	—
28	2	5	7	88	1	—	—
29	1	1	6	89	1	—	—
30	4	9	9	92	1	—	—
31	2	1	1	98	-	1	—
32	3	2	2	99	-	-	1
33	1	-	2	102	-	1	—
34	-	-	6	103	1	—	—
35	4	3	3	108	1	-	1
36	3	9	3	111	1	-	1
37	-	1	—	116	1	—	—
38	1	3	—	120	1	—	—
39	1	-	1	124	-	-	1
40	3	1	1	125	-	1	—
41	-	1	1	134	-	-	1
42	2	2	2	144	-	-	1
43	1	1	—	156	1	—	—
44	4	1	3	165	-	1	—
45	-	-	1	168	1	—	—
46	-	-	1	210	1	1	—
47	-	3	1	213	1	—	—
48	3	1	—	234	-	1	—
49	—	—	—	302	-	1	—
50	-	-	3				

DEATHS.

In the Year 1829 - - 18
1830 - - 18
1831 - - 15

N.B.—The years 1829, 1830, and 1831 have been taken in consequence of the time-books for 1832 being at the Admiralty Office.

E. JESSEP.

Plymouth Dock Yard, }
1st June 1833. }

AN ACCOUNT showing the Number of Workmen employed in PEMBROKE YARD, and of the Cases of Absence from Work on account of Sickness, during the last Three Years. Prepared pursuant to Captain Superintendent's Minute of this day.

PERIOD.	Number of Workmen employed.	Number of Cases.	Number of Deaths.
In the Year 1830 - -	454	239	4
— 1831 - -	451	274	1
— 1832 - -	433	188	2

Pembroke Yard, }
10th May 1833. }

R. LAWS.

RICH. TOBIN.

These returns from the Dock Yards are all of them important, but would have been infinitely more so if they had been made on one uniform plan, so as to admit of comparison; and if, from so great a number of persons employed in six different parts of the kingdom, returns could have been obtained, stating one by one the several ages of the workmen, and the amount of sickness which they severally had experienced, it would have been an immense boon conferred on the nation; and such a boon, it is to be hoped, may yet be obtained from the patriotism of His Majesty's Government.

Limited as is the information which these returns affords, there is nevertheless such a diversity between one Dock Yard and another, as strongly to excite our curiosity as to the causes of such diversity, or as to the diversity of the manner in which the accounts are kept.

ON SICKNESS IN THE FACTORIES.

In order to ascertain the amount of sickness prevailing amongst the operatives in the factories as stated in the returns made to the Commissioners, an account has been taken of every one at each age, and distinguishing the males from the females. In these calculations I have included all the factories which employed two hundred persons and upwards. The factories employing fewer persons have been omitted, because of the shortness of the time to complete so long and laborious calculations, and the necessity of finishing this Report by the time of the meeting of parliament. As every factory without exception employing two hundred and upwards has been taken into account, the results are as impartial as if the whole had been included, and perhaps they give a better view of the effect of factory labour on the human constitution.

It has already been reported, that in the greater number of factories the returns were made from the recollection of the operatives, who were one by one examined as to the time they have lost by sickness during the preceding twelve months. Such inquiry could therefore only be an approximation; but as the operatives during their loss of time, not only were subjected to the pain of disease, but also in most instances to cessation of income, or if, through the liberality of the masters, they were paid, those paid were under medical surveillance, they could probably in most instances tell very correctly; and if some exceed, others might fall short, so that the average might not be far from the exact time.

In making an account of the sickness, I have classed the factories into eight divisions: —

1. The Cotton Factories in Lancashire and the neighbouring counties.
2. The Wool Factories in the North of England.
3. The Flax Factories at Leeds.
4. The Potteries.
5. The Silk Factories in England.
6. The Wool Factories in the West of England.
7. The Cotton Factories at Glasgow and in the adjacent counties.
8. The Factories, chiefly Flax, on the east coast of Scotland.

Some

Some subdivisions which were useful in taking an account of the wages were impracticable in taking an account of sickness, in consequence of there not being numbers sufficient to afford any thing like a satisfactory average.

The results are as follow :—

SICKNESS in the COTTON FACTORIES, LANCASHIRE.

Age.	MALES.		FEMALES.	
	Average Duration of Sickness per Annum for every Person employed.	Average Duration of Sickness per Annum for every Person sick.	Average Duration of Sickness per Annum for every Person employed.	Average Duration of Sickness per Annum for every Person sick.
	<i>Days and decimal parts.</i>	<i>Days and decimal parts.</i>	<i>Days and decimal parts.</i>	<i>Days and decimal parts.</i>
Under 11	2.46	13.04	8.03	—
From 11 to 16	3.81	14.58	4.25	11.98
— 16 to 21	4.42	16.43	5.56	12.63
— 21 to 26	4.91	18.27	6.85	16.42
— 26 to 31	6.88	22.14	8.62	18.51
— 31 to 36	3.85	12.19	9.29	21.77
— 36 to 41	4.13	13.75	6.16	19.19
— 41 to 46	5.09	14.25	14.67	14.41
— 46 to 51	7.18	30.31	20.34	26.43
— 51 to 56	3.47	13.10	15.75	21.00
— 56 to 61	12.68	11.5	15.75	21.00

SICKNESS in the WOOL FACTORIES, NORTH of ENGLAND.

Under 11	2.01	11.75	8.90	35.32
From 11 to 16	3.59	11.04	6.40	14.84
— 16 to 21	5.31	17.14	6.98	19.96
— 21 to 26	7.42	19.97	13.70	29.34
— 26 to 31	10.03	25.25	13.54	30.53
— 31 to 36	7.91	21.85	22.52	50.85
— 36 to 41	5.43	15.37	15.21	24.75
— 41 to 46	10.56	23.88	8.42	26.90
— 46 to 51	12.90	35.46	19.16	40.83
— 51 to 56	7.49	21.76	12.	22.00
— 56 to 61	5.19	41.8	126.	126.00

SICKNESS in FLAX FACTORIES, LEEDS.

Under 11	1.94	5.24	1.33	5.75
From 11 to 16	3.61	6.97	3.26	9.55
— 16 to 21	4.16	17.93	5.62	13.62
— 21 to 26	4.42	15.11	5.31	14.15
— 26 to 31	5.03	14.75	4.36	13.56
— 31 to 36	4.19	15.78	3.44	7.66
— 36 to 41	5.10	16.39	4.16	9.50
— 41 to 46	8.79	24.19	14.87	35.
— 46 to 51	5.64	11.87	4.	4.
— 51 to 56	6.15	18.33	—	—
— 56 to 61	15.84	32.04	3.5	7.

SICKNESS in the POTTERIES, STAFFORDSHIRE.

Under 11	4.84	14.07	—	—
From 11 to 16	3.66	14.71	6.86	21.83
— 16 to 21	10.61	31.91	6.51	19.65
— 21 to 26	8.96	27.66	9.86	32.26
— 26 to 31	4.89	19.10	13.12	38.86
— 31 to 36	6.16	19.39	14.29	46.98
— 36 to 41	9.33	30.17	9.90	16.25
— 41 to 46	6.80	29.91	27.25	60.25
— 46 to 51	13.53	32.22	10.5	21.
— 51 to 56	7.91	24.9	3.93	8.5
— 56 to 61	25.51	44.8	50.5	60.5

SICKNESS in SILK FACTORIES in ENGLAND.

Under 11	3.79	7.19	4.35	10.01
From 11 to 16	7.62	17.23	11.17	22.84
— 16 to 21	6.43	18.61	12.07	29.08
— 21 to 26	7.44	27.34	14.06	29.04
— 26 to 31	6.48	20.16	12.85	28.32
— 31 to 36	8.76	30.14	23.48	29.87
— 36 to 41	13.41	2.3	18.61	40.34
— 41 to 46	17.5	50.75	22.18	35.65
— 46 to 51	0.45	1.5	7.00	14.52
— 51 to 56	10.33	22.75	3.61	7.6
— 56 to 61	3.50	16.5	52.00	82.00

SICKNESS in WOOL FACTORIES in the WEST OF ENGLAND.

Age.	MALES.		FEMALES.	
	Average Duration of Sickness per Annum for every Person employed.	Average Duration of Sickness per Annum for every Person sick.	Average Duration of Sickness per Annum for every Person employed.	Average Duration of Sickness per Annum for every Person sick.
	<i>Days and decimal parts.</i>	<i>Days and decimal parts.</i>	<i>Days and decimal parts.</i>	<i>Days and decimal parts.</i>
Under 11	2.14	11.09	5.20	13.39
From 11 to 16	2.98	15.73	5.48	16.24
— 16 to 21	3.57	19.19	4.57	14.60
— 21 to 26	6.82	27.28	6.41	20.38
— 26 to 31	5.34	22.11	9.11	28.38
— 31 to 36	4.93	18.76	9.26	27.50
— 36 to 41	5.08	25.29	9.46	20.82
— 41 to 46	4.52	17.46	9.55	27.59
— 46 to 51	7.49	27.52	13.47	33.50
— 51 to 56	3.62	17.93	86.0	19.03
— 56 to 61	13.56	35.54	14.51	30.91

SICKNESS in COTTON FACTORIES, GLASGOW, &c.

Under 11	1.01	3.61	2.63	14.90
From 11 to 16	4.80	12.35	6.18	13.81
— 16 to 21	5.52	17.14	6.33	15.54
— 21 to 26	9.11	20.12	8.16	18.96
— 26 to 31	7.05	16.05	7.38	19.81
— 31 to 36	7.65	16.93	6.05	13.05
— 36 to 41	8.50	22.58	4.16	16.00
— 41 to 46	5.12	16.41	11.94	20.36
— 46 to 51	4.84	20.57	11.72	40.60
— 51 to 56	4.90	16.41	16.50	25.85
— 56 to 61	3.27	8.84	15.0	30.2

SICKNESS in FACTORIES on the EAST COAST of SCOTLAND.

Under 11	5.65	6.58	2.76	3.97
From 11 to 16	8.96	15.29	9.71	18.96
— 16 to 21	8.54	18.25	12.68	20.59
— 21 to 26	7.70	19.56	11.90	19.00
— 26 to 31	2.72	11.68	9.13	16.70
— 31 to 36	2.46	25.04	6.92	16.58
— 36 to 41	2.01	9.94	4.77	12.09
— 41 to 46	2.57	11.53	9.98	17.15
— 46 to 51	5.81	14.88	8.63	14.80
— 51 to 56	6.45	31.00	.50	2.
— 56 to 61	8.10	13.41	12.54	41.16

By a reference to the tables in the earlier part of this Report it will be seen that the numbers of the operatives, and more particularly of the females, in the factories, is very small after thirty and thirty-five years of age. It necessarily follows that where numbers are small, averages are subject to great irregularity. I have, however, carried the calculations as far as sixty-one, beyond which period it would have been totally useless.

The rate of sickness will be found to vary considerably in different districts and different branches of manufacture, but whether arising from local and temporary or from permanent causes, the returns do not enable me to decide. The amount of loss of time amongst the females in the silk factories in England, and in the factories on the east coast of Scotland, seems unusually large, and excites a suspicion that the operatives may have sometimes absented themselves from having more profitable occupation at home, and alleged sickness as the cause; but I have no proof that such was the case.

As an account of the loss of time by sickness could only be taken from those persons actually employed at the factories at the time, it necessarily follows that the amount will be less than would be shown by the books of a benefit society to which the operatives might belong, inasmuch as it could not include the sickness of those who left the factory, and, either from death, permanent incapacity, or finding more profitable employment, never returned. On the other hand, the benefit societies do not grant relief for sickness occasioned by drunkenness, fighting, and certain other indiscretions, and therefore their books will not include sickness arising from these causes. The same is the case with the East India Company.

Whereas

Whereas the returns from the factories include all loss of time from sickness from whatsoever cause arising; and as persons in factories are not exempted from human frailty more than others, this is a source of sickness which in any comparative view must not altogether be forgotten.

Taking all in all, from the documents brought before me, I have seen no grounds for warranting me in believing that factory labour in any material degree differs in its effects on health from other labour, and at all events the results ascertained from this long and laborious investigation appear to me to afford unanswerable evidence that the laudatory and condemnatory exaggerations of both parties are alike unfounded in truth.

The only mode of arriving at a decisive conclusion respecting the precise effect of factory labour on the human constitution, as compared with other employments followed by persons in the same station of life, is that pointed out in the instructions of the Central Board, namely, obtaining returns from the benefit societies, in which a separate account is taken of the members of the society who work in factories, and of those who do not. Two such results are given in the Appendix, from Catrine in Ayrshire. But in order that such returns may be of any value, the account must be given of the members one by one, and the ages as well as the duration of sickness must be stated. For an extremely small remuneration, many of the secretaries of benefit societies would be induced to make such a return; and the results, if they led to no important legislative enactment, would supply a basis of sound calculation, which would be a boon conferred on the industrious classes worthy of an enlightened government.

Having now, to the best of my ability, brought the investigation of the Factory Returns to a conclusion, I have only to lay before you this Report, and to subscribe myself, with great respect,

Gentlemen,
Your most obedient humble servant,

JAMES MITCHELL.

36, New Broad Street, London, }
21st January 1834.

APPENDIX.

The COTTON FACTORIES from which returns have been made, stating, one by one, the wages of every operative, are the following, being described either by the usual names of the mills, or by the names of the proprietors : —

In the counties of Lancaster and Cheshire — John Pennington, Hindley ; Wilkinson, near Stockport ; Rothwell, Bolton ; Fegan and Gudgeon, Wigan ; Islington Mill, Salford ; Henry Marsland, Stockport ; H. and E. Ashworth, near Bolton ; Fielden, Thorp, and Townley, Blackburn ; E. and W. Bolling, New Mill ; Coronation Mill ; Bridge Street Mill ; Bradshawgate Mill ; Knot Mill ; Spring Gardens Mill ; Flash Mills ; New Stone Mill ; Hardy and Andrews, Stockport ; William Higgins, Cotton Street, Old Field Road, Stockport ; Ditchfield and Co., Bolton ; Eckerslie, Wigan ; Grove Mill, Heaton Norris ; Thomas Hearnley ; Charles Ashworth and Co., Little Bolton ; James Aaron and Sons ; Goodwin and Hughes, Bolton ; Roach Mills, Preston ; Park Place Mill, Blackburn ; Princes Street Mill, Wigan ; Woods, Wigan.

In the county of York — Sedgwick, near Shipton ; Ingham, Halifax ; Stansfield, near Halifax ; Castlefield, Bingley.

In Scotland, returns of the wages of the operatives, one by one, have been received from the following Cotton Factories : —

In the county of Lanark — Macleroy, Hamilton, and Co. ; Somerville and Sons ; A. Thompson and Co., Adelphi Mills ; Houldsworth and Co., Anderston ; John Miller, Wellington Factory ; Boglie and Co., Bridgton ; Monteith and Co., Blantyre Works ; Mac Phail and Co., Broomward ; Greenhead and William Street, Glasgow ; William Hussey and Sons, Ayton Place Mill ; Couper, Maitland, and Co. ; John Dennistoun and Co., Barrowfield Mills ; Mac Naught and Co. ; Clark ; Patrick Mac Naught, Anderston ; May and Denistoun ; Bartholomew and Co. ; Monach and Co. ; Robert Marshall ; R. F. and S. Alexander ; Mile End Mill ; Dovecourt-hall Mill.

In the county of Renfrew — J. and S. Finlay, Bridge of Weir ; Bushy Mills ; Brown and Malloch, Johnston ; Dunlop and Sons ; Crosslee Mills ; Linwood Mills ; Fulton, Buchanan, and Co. ; Calderhaugh ; Eaglesham Mills ; Thornlie Bank Mill ; William Craig, Broadley Mill ; Robert Montgomery, Paisley ; Alexander Stewart, Johnston ; J. and S. Finlay, Houston ; Lochwinnoch Mill ; Ellerslie Mill ; Matthew Brown and Co. ; Houston and Co., Johnston ; West Arthurlie Mill ; —rr Jun. & Co., Paisley ; Cartside Mill ; Floors Mill ; Crofthead Mill, Neilston.

In Rothsay — Rothsay Mill.

In Stirlingshire — Macgregor and Co., New Kirkpatrick.

In Clackmannanshire — Alva and Dollar Mill.

In Aberdeen — Bannerman and Co.

Two Cotton Factories in Belfast, Ireland, have made a return of wages — Joseph Stevenson, Springfield, and the Lodge Mill.

The WOOL FACTORIES from which returns of the wages have been received are as follow : —

In Yorkshire — Willans and Co., Leeds ; Gott and Sons, Leeds ; Walker and Sons, Leeds ; John Howard, Leeds ; James Holroyd and Co., Leeds ; Kirkstall Abbey Mill ; Bruce and Dorrington ; Clapham and Sons ; Carr Mill ; Hindley and Derhum, Leeds ; Ripley and Ogle, near Leeds ; Priestley, near Halifax ; James Brown and Co. ; Bugby Mills ; Baldwin, Halifax ; Millhouse, Sowerby, near Halifax ; Holdsworth.

In Leicestershire — Thomas Gambles, Chapman, Forsall, Bankart, Brewer, and Whetstone.

In Nottinghamshire — Dyehouse Mill.

In Lancashire — Hardman, Wigan ; Cartwright, Wigan ; Axon, Heaton Norris ; Eccles, Wigan.

In Gloucestershire — H. and J. Davis, Chalford ; William Lewis, Brinscombe ; Helm, Stroud ; Wood, Stonehouse ; New Mills, Stroud ; Watham, Woodchester ; Partridge and Co, Bowbridge ; Nathaniel Marling, Stroud ; Barnard and Co., Nailsworth ; Harding and Sons, near Stroud ; Hope Mill, Rodborough ; Matthew Rice ; Small's Mill, near Stroud ; Palling and Son, Painswick ; Thomas Gordon, Painswick ; Durett and Co., Wootton Under Edge ; Staunton and Sons, Stafford Mills, near Stroud.

In Somersetshire — Britton and Houston, Frome ; Hapsford Mill, near Frome ; Wilkins and Co., Tiverton, near Bath ; Spackman, Hinton.

In Wiltshire — J. L. Phillips, Melksham ; Couper, Brothers, and Co., Bradford ; Thomas Spackman, Holt Mill ; William Holloway, Bradford ; Boyers and Co., Westbury Leigh ; Daniel Rawlings, Chippenham ; Yerbury, Edmunds, and Co., Bradford. And from Trowbridge — John and Thomas Clarke ; Clarke and Perkins, Silver Street Mill ; Webb ; Salter ; Oborn ; William Edgell ; James Edgell ; Stancombe and Wilkins ; John Stancombe ; William Stancombe.

In Scotland — Pirie and Co., Aberdeen ; Alexander Hadden and Sons, Aberdeen ; John Paton, Alloa ; Joseph Hill, Stirlingshire.

Of the Factories engaged in the manufacture of FLAX, returns of the wages of the operatives were received from Marshall and Co.; Tetley, Tatham, and Walker; Wilkinson; and Benyon and Co., all of Leeds.

From Scotland the returns from the Flax Factories were very numerous, comprehending —

From Aberdeen — Grandholm Mill; Richards and Co.; and Spring Gardens Mill.

From Montrose — Richards and Co.; Crawford and Smith; Kinnaber; Paton.

From Arbroath — Union Street Mill; Bank Mill; Dunn and Son; Orchard Mill; Park Mill; John and William Stenton; Aberdeen, Gordon, and Co.; Inch Mill.

From Dundee — John Gray; Mann; Anchor Mill; Aberdeen, Gordon, and Co.; John Roxburgh; Chalmers and Hackney; John Brown; Andrew Brown; Peter Kenmond; South Dens; Lower Dens; Boyack; John and William Morton; Edwards; Forbes; Chrichton; Hospital Mill; Matthew; Low; Halley; Sharp; Balfour and Meldrum; Greenwood and Mac Intosh; Grimmond; Oak Bank; Dunston; David Cairncross; Brown; Quarry Mill; Alexander Dick; Balbirnie; Thomas Gray; East Haugh; Baxter; Brothers; J. W. Brown; Scouringburn Mill; William Fife.

From other parts of the county of Forfar — Arroll, Brechin; Finhaven Mill; Lawton and Millfield; Hatton Mill; Aberdeen, Gordon, and Co., Logieport; Richards and Co.

From the county of Fife the returns of wages were from Rutherford, Dunfermline; James Ayton, near Kirkaldie; East Prenlawr Mill; Templeton; Haggard at Leslie; Wilton at Pitleven; Neilson and Co., Kirkland; Thomas Philips and Co., Dysart; Milport, Dunfermline; Balgonie; Arthur at Kinghorn; Henry at Abbotshall; John Walker; George Morice.

Only one Flax Factory in Ireland, that of Mullholland, has made a return of wages.

Of the SILK FACTORIES, returns of wages from Derby have been received from Foster; William Taylor; William Brown; Wright; James Peel; Wright and Butler; Thomas Bridget and Co.; Stevenson and Frost; Bowden and Morley; Dallison.

Returns have also been received from Old Acre, Leicester; from Chambers, Mansfield, Nottinghamshire; from James Holdforth, Leeds. Also from Baker, Tod, and Co.; and Lester and Son, Newcastle, Staffordshire.

Of the Silk Factories in Norfolk, Suffolk, and Essex, returns of wages have been received from Grout, Baylis, and Co., Ditchingham; Great Yarmouth; and Mildenhall, Suffolk; Courtauld, Taylor, and Co., Braintree; Abbey Mills, Coggeshall; and Braintree Silk Mills.

The returns of wages from the Silk Factories in Somersetshire are from Nalder and Hardisty, Shepton Mallet; Darshill; and William Ward, Home Factory, Bruton.

The returns of wages from the Silk Factories at Paisley in Scotland are from Carswell and Co.; Kerr and Sons; Coats; Carlisle and Sons.

Returns of wages were received from the following POTTERIES in Staffordshire:—John Ridway, Shelton; John Meir, Tunstall; Mason and Co., Lane Delph; Goodfellow, Tunstall; Adams and Sons, Hanley; Nile Street, Burslem; Thomas Mayer, Stoke-upon-Trent.

Of the LACE FACTORIES returns have been received from Johnson and Co.; Wright; Undsworth; Ward; and Brown; in Derby. From Morris, Nottingham; Foot and Co., New Radford; Fisher, Radford Works; and Stanton Mill, Mansfield, in the county of Nottingham. Also, from Heathcoat and Co., Tiverton, Devonshire.

The DYEHOUSES in Leeds which have made a return of wages are George and Horsfall.

A return of wages has been received from the GLASS WORKS of Bailey and Co., Porto Bello, Midlothian.

Returns of wages have been received from the PAPER MILLS of Alexander Irvine, Peterculter, and Alexander Pirie, Stonywood.

RETURNS ON EDUCATION.—Almost all the factories which gave a return of the wages of the operatives one by one also made a return as to whether they could read or write. In addition to these, many other returns on education were obtained.

In the county of Lancaster — Taylor and Martin; Lees and Co., Gorton Mills; Brooks and Smith, Bolton; Roger Holland and Co.; Taylor, Hindley, and Co.; Clayton, Heaton Norris; Birley and Kirk, Chorlton; Greenwood and Whitaker, Burley; Bevan, Wigan; Barnes, Farnworth; Old Stone Mill, Little Bolton; Roads; Higson, Heaton Norris.

In the county of Cheshire — From Parrot, Stockport; Steele, Stockport; Henry Barlow, Stockport; T. and J. Brocklehurst, Macclesfield; Walter, Macclesfield; Pearson and Brothers, Macclesfield; Samuel Thorp, Manchester; Brocklehurst; Old Mill and Lower Mill, Hurdfield.

In Worcestershire — Buckingham.

In Birmingham — Ratcliffe.

In the county of York — From Maclean and Marsh; Smith and Taylor; John Sayner; James Robinson; Taylor, Woodbeck, and Co., Hunslet Lane; Thomas Woolriche, Dewsbury Mills; Hargrave and Sons; Pim Nevins, and Sons; Acroyd and Otley; Wise; Naylor; Greenlaw and Lingfield; Walker and Edmunds.

- In the county of Derby — From John Hacket; Derby Silk Mills; Wilson and Moore; Robinson; William Adcock; Moore and Co.; Booth, Rigley, and Co.
- In the county of Stafford — Phillips and Co.; Thompson and Co.; Allcock and Co.; Hicks and Co.; Copeland and Garratt; Anchor Pottery.
- In the county of Nottingham — Spencer and Co.; Sneath and Son, Culling Mill, Nottingham; Old Mill, Mansfield; Wakefield, Hardwich; Sutton Works, near Mansfield.
- In the county of Wilts — From Abbey and Langford Mills; Weaving Shops, Westbury; Town Mill, Westbury; Betham Mill, Westbury.
- In the county of Somerset — From Shepherd, Spring Gardens, near Frome.
- In the county of Gloucester — From Daniel Cox, Chalford; N. and J. Jones; Thomas Jones; John Marling, Ebley; Hall, English, and Co.; Charles Hooper, Eastington; Long, Wootton-under-Edge; Town Mill; Nind Mill; Needman, Stroud; J. and T. Lewis, Pitchcombe Mills; Maclean, Stephens, and Co; William Naish, Bristol.
- In Aberdeenshire — From Gordon, Barron, and Co., Woodside; Forbes, Low, and Co.
- In Forfarshire — From Burnside, Dundee.
- In Perthshire — From the Stanley Mills and Deanston Mills.
- In Fifeshire — From Sevon, Kinghorn; Pitscottie Mill.
- In Clackmannanshire — From Thomas Gillies; J. and P. Paton; Keelor's Brae, Alloa; and James Dawson.
- In Stirlingshire — From James Harroway; John Archibald; Stirling and Millholm; Wilson and Son, Bannockburn; Findlay and Co., Ballindalloch, near Balfroun; Colcreugh Company.
- In Lanarkshire — From Barrowfield Printing Factory; Mackellar and Turner.
- In Renfrewshire — From James Clark, Sneddam; and N. and P. Pollock, Paisley.
- In Ayrshire — From Findlay and Co., Catrine.
- In Ireland — From Stevenson and Co.; and another factory, Belfast.

On the preceding list I have to remark, that by far the larger number of persons who prepared the returns, whilst they gave so many other particulars, never thought of writing down the name of the firm, or the branch of manufacture in which they were engaged. In classifying the returns it was therefore necessary to refer to the columns stating the description of work in which the operative was engaged, and, from the technical terms used, make out the material manufactured; and this was often a difficult matter. As to the names of the firms, or of the factories, in most instances they were endorsed on the returns by some party before coming into my hands, but whether always correctly or not I cannot say. If any misdescription appear, it will be attributed to the right cause.

WAGES per WEEK of the following Classes of ARTIZAN LABOUR in ABERBROTHWICK and its Vicinity.

	1812.	1813.	1814.	1815.	1816.	1817.	1818.	1819.	1820.	1821.	1822.	1823.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	1833.	Average on 22 Years.
Ship Carpenters	22/0	22/0	22/0	20/0	16/0	15/0	15/0	15/0	14/0	14/0	15/0	15/0	18/0	22/0	20/0	15/0	14/0	14/0	14/0	14/0	14/0	14/0	16/6½
House ditto -	—	—	—	—	—	—	14/0	14/0	14/0	14/0	14/0	14/0	14/0	17/0	15/0	12/0	12/0	12/0	12/0	12/0	12/0	12/0	13/4½
Masons -	12/8½	12/7½	11/6¾	10/0½	9/3	9/0	11/4	9/0	9/3	10/0	9/10	12/7	14/0	14/1½	10/3½	10/3½	10/3½	10/3½	10/3½	10/3½	10/3½	10/3½	10/9½
Founders -	21/0	21/0	21/0	21/0	21/0	21/0	21/0	21/0	21/0	21/0	21/0	21/0	21/0	21/0	20/0	20/0	20/0	20/0	20/0	20/0	20/0	20/0	20/8
Blacksmiths -	16/0	16/0	18/0	25/0	21/0	20/0	20/0	20/0	20/0	16/0	16/0	16/0	16/0	16/0	16/0	15/0	15/0	15/0	15/0	15/0	15/0	15/0	17/1½
Tailors -	15/0	15/0	15/0	15/0	15/0	15/0	15/0	15/0	15/0	15/0	15/0	15/0	15/0	16/0	15/0	15/0	15/0	15/0	15/0	15/0	15/0	18/0	15/2¼
Shoemakers -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Range from 12/0 to 10/0 per week during the whole period.																							
Curriers -	32/0	32/0	32/0	32/0	30/0	30/0	30/0	28/0	28/0	28/0	28/0	28/0	28/0	28/0	28/0	28/0	28/0	28/0	28/0	28/0	28/0	28/0	29/0
Tanners -	15/0	15/0	15/0	15/0	14/0	14/0	14/0	14/0	13/0	13/0	13/0	13/0	13/0	13/0	13/0	13/0	13/0	13/0	13/0	13/0	13/0	13/0	14/2½
Millwrights -	12/0	12/0	14/0	18/0	18/0	16/0	20/0	20/0	18/0	16/0	15/0	15/0	18/0	20/0	17/0	12/0	14/6	15/0	12/0	12/0	13/0	15/0	15/6¾
Weavers -	16/0	16/0	16/0	14/0	12/0	12/0	12/0	12/0	12/0	13/6	14/0	13/0	13/0	13/0	12/0	12/0	12/0	12/0	12/6	12/0	12/0	12/6	12/11¾
Flax-dressers -	15/0	15/0	15/0	15/0	12/6	9/0	9/0	9/0	9/0	10/0	10/0	10/0	12/0	13/6	10/6	10/6	10/6	10/6	10/6	10/6	12/0	13/6	11/6

The Materials composing the above Return have been collected and prepared by the Provost of Aberbrothwick.

Aberbrothwick, 4th June 1833.

WM. ANDSON.

APPENDIX to the REPORT by Dr. MITCHELL.

CATRINE COTTON WORKS, PARISH OF SORN, AYRSHIRE, 1833.

No. 1.

NUMBER of FEMALES who left the Works to be married, from 1st January 1818 to 1st January 1833.

Year 1818	-	married 17	Year 1827	-	married 20
1819	-	- 7	1828	-	- 22
1820	-	- 9	1829	-	- 19
1821	-	- 13	1830	-	- 9
1822	-	- 18	1831	-	- 9
1823	-	- 17	1832	-	- 13
1824	-	- 14			
1825	-	- 13			
1826	-	- 5			205

No. 2.

STATEMENT of DEATHS of the People employed at CATRINE WORKS from 1st January 1813 to 1st January 1833.

Name and Age.	Cause of Death.	Name and Age.	Cause of Death.
1813.		1818.	
Hugh Millar, 70 years	Frailty.	Jean M'Lellan, 56 years	Mortification of a leg.
Janet Thomson, 19 -	Consumption.	Margaret Nimmo, 11	Water in the head.
	Two.	Margaret Stewart 20 -	Accident.
1814.		Moses White, 18 -	Pulmonary consumption.
James Dunn, 12 -	Fever.	Janet Andrew, 15 -	Scrofula.
Margaret Moffat, 17 -	Consumption.	Susan Climmie, 9 -	Water in the head.
Margaret Lirigo, 14 -	Fever.	Janet M'Cartney, 11	Measles.
Janet Millar, 30 -	Consumption.	Agnes Rice, 10 -	Typhus fever.
Mary Orr, 17 - -	Ditto.	Mary Smith, 68 -	Dropsy.
Jean Sliman, 16 -	Fever.		Nine.
Thomas Kirkwood, 65	Frailty.	1819.	
	Seven.	Finlay Cook, 31 -	Suddenly.
1815.		John Abernethie, 15 -	Diseased liver.
William Parker, 12 -	Bursting of a blood vessel.	Elizabeth Finlater, 35	Consumption.
Agnes Ross, 12 -	Diseased liver.	James Barbour, 42 -	Ditto.
Janet Pollock, 21 -	Rheumatic affection of the heart.	Janet M'Kinna, 23 -	Childbed.
William Patrick, 10 -	Chronic inflammation of liver.	Sarah Muir, 18 -	Consumption.
John Welsh, 14 -	Diseased hip joint.	Jean Wyllie, 25 -	Ditto.
	Five.		Seven.
1816.		1820.	
Jean M'Lure, 9 -	Nervous Fever.	William Black, 70 -	Inflammation.
David Weir, 12 -	Consumption.	William Blackwood, 62	Frailty.
James Dale, 18 -	Ditto.	Elizabeth Hunter, 50	Inflammation.
James Gillies, 15 -	Palsy.	Margaret Kay, 17 -	Consumption.
Helen M'Call, 18 -	Inflammation.	Jean Henderson, 16 -	Ditto.
Agnes Reid, 16 -	Fever.	Jemima Gibb, 11 -	Water in the head.
John Andrew 45 -	Scrofula.		Six.
	Seven.	1821.	
1817.		James Blackwood, 15	Small-pox.
Jean Muir, 27 - -	Fever.	Margaret Johnston, 11	Inflammation.
Elizabeth Tail, 24 -	Diseased liver.	Jean Cleland, 34 -	Consumption.
Ann Kennedy, 30 -	Consumption.	Margaret Pollock, 21	Fever.
Jean Mearns, 20 -	Ditto.	Margaret Coats, 35 -	Suddenly.
Janet Campbell, 16 -	Ditto.	Margaret Aird, 22 -	Small-pox.
James Drummond, 40	Diseased liver.		Six.
Robert Williamson, 16	Palpitation.	1822.	
John Cowan, 14 -	Water in the head.	James Murray, 18 -	Water in the head.
Neil M'Allister, 14 -	Diseased liver.	Margaret Stewart -	Consumption.
	Nine.	Mary Maize, 26 -	Ditto.
		Jean Hodge, 9 $\frac{1}{4}$ -	Water in the head.
			Four.

Statement of Deaths of the People employed at Catrine Works — *continued.*

Name and Age.	Cause of Death.	Name and Age.	Cause of Death.
1823.		1828.	
James Boyle, 76 years	Frailty.	Janet Barrison, 19 years	Consumption.
John Wilson, 20 -	Consumption.	Agnes M'Dowall, 82	Apoplexy.
Agnes Kirkland, 67 -	Disease in the head.	Mary Young, 16 -	Consumption.
George Edwards, 44 -	Consumption.	Mary M'Whinnie, 24	Ditto.
John M'Kie, 29 -	Ditto.	Elizabeth Quails, 38 -	Ditto.
John Ferguson, 20 -	Ditto.	William Hannah, 13	Ditto.
Janet M'Creadie, 35 -	Ditto.		Six.
Samuel Muir, 12 -	By a carriage passing over him on the street.	1829.	
Ann M'Cartney, 15 -	Consumption.	John Dalziel, 50 -	Consumption
James M'Kinnel, 42 -	Ditto.	Adam Aird, 55. -	Inflammation
Janet Milliken, 20 -	Ditto.	Rebecca Calderwood, unknown -	} Ditto.
William Seaton, 41 -	Water in the chest.	Andrew Lees, 16 -	Consumption
William Deerie, 15 -	Fever.	Flora Mathieson, 15 -	Ditto.
	Thirteen.	Jean Smith, 15 -	Ditto.
		Ann Cowan, 17 -	Ditto.
1824.		Agnes Watson, unknown	Ditto.
Thomas Balfour, 80 -	Frailty.		Eight.
David Brown, 10 $\frac{1}{2}$ -	Consumption.	1830.	
Jean Millar, 12 -	Water in the head.	Mary M'Carlie, 20 -	Consumption.
Helen M'Intyre, 17 -	Consumption.	Helen M'Lintock, 25	Dropsy.
Agnes Muir, 17 -	Ditto.	Sarah Hamilton, 15 -	Consumption.
Agnes M'Callister, 24	Ditto.	John Sliman, 17 -	Ditto.
Elizabeth Baird, 13 $\frac{1}{4}$	Water in the head.	Jean Bone, 15 -	Ditto.
Euphemia Brown, 44	Cancer.	Mary Goldie, 22 -	Ditto.
Grizzel Kennedy, 54	Consumption.	Martha M'Cabe, 23 -	Ditto.
	Nine.	Margaret Meikle, 20 -	Ditto.
1825.		Margaret Fisher, 47 -	Dropsy.
Mathew Millar, 56 -	—		Nine.
James Donaldson, 75	Inflammation.	1831.	
Catherine Dalziel, 16	Consumption.	John Whyte, 65 -	Dropsy.
David Mackie, 52 -	Apoplexy.	Agnes Reid, 14 -	Fever.
Grizzel Hillhouse, 21	Consumption.	Alexander Murdoch, 28	Swelling in the throat.
Mary Hiddley, 14 -	Ditto.	Marion Hamilton, 43	Brain fever.
	Six.	Janet Clark, 16 -	Consumption.
1826.		Margaret Donald, 80	Frailty.
Agnes Malcolm, 34 -	Consumption.	Thomas Lambert, 85	Ditto.
Janet Dobson, 20 -	Fever.	James Carlile, 61 -	Consumption.
Agnes Ballantine, 15 -	Consumption.	Catherine Anderson, 45	Cancer.
Andrew Caldow, 23 -	Inflammation.	Agnes Young, 17 -	Dropsy.
Agnes Blackwood, 16	Consumption.		Ten.
James Muir, 58 -	Inflammation.	1832.	
Margaret M'Cracken, 60	Water in the chest.	Isabel M'Kinlay, 18 -	Dropsy.
Isabel Logan, 36 -	Consumption.	Euphemia Stirling, 24	Consumption.
Catherine Mitchell, 59	Atrophy.	Jean Young, 17 -	Ditto.
	Nine.	John Wyllie, 67 -	Asthma.
1827.		Hugh Ferguson, 62 -	Palsy.
Jean Andrew, 26 -	Asthma.	Peter Seaton, 60 -	Frailty.
Margaret Templeton, 41	Apoplexy.	Mary M'Whirter, 16 -	Typhus fever.
Janet Stewart, 20 -	Water in the head.	Janet Murray, 16 -	Consumption.
Margaret Waterson, 13	Consumption.	Mary Ramage, 21 -	Ditto.
Andrew Ronald, 45 -	Water in the chest.	Middleton M'Gregor, 52	Dropsy.
	Five.	Barbara M'Clymont, 60	Inflammation.
			Eleven.

Total Deaths since 1813, One hundred and forty-eight.

A B S T R A C T.

Average number of people employed in Catrine Cotton Works }
 from 1st January 1813 to 1st January 1833, - } 898

Average number of deaths, 7 $\frac{2}{3}$ per annum, equal to .824 of a decimal; being under one per cent.

No. 3.

SCHOOLS.

Day Schools in Catrine.

[illegible]

Evening Schools in Catrine.

Taught by James Park, exclusively for the young people employed in the works. Number of pupils, boys, 80; girls, 140; total, 220; viz. reading and spelling, 150; writing and arithmetic, 70

The attendance during the year has been in the proportion of twenty-five to one. Teacher's salary, 50*l.*; books given as rewards to monitors, 5*l.* 0*s.* 6*d.*; general monitor, 1*s.* per week; to a woman for cleaning school-room daily, 3*l.* 18*s.* per annum; to four children at day school, 3*l.* 13*s.* 6*d.* Besides school-room and gas-light.

Eighteen of the above number attend the sewing schools an hour each night, for which the sewing mistress has a salary of 9%.

Total amount paid by the Catrine works for education per annum, 74*l.* 4*s.*

Rate per pupil, 6.745s. or 6s. 9d. nearly.

Other Evening Schools in the Village, who choose their own Instructors, and pay at the Rate of 3d. each per Week, all of whom are employed in the Factories during the Day.

Taught by William Bryan	- { Writing	-	-	-	-	-	-	-	23
	- { Arithmetic	-	-	-	-	-	-	-	6
									29
Taught by William Blackwood	- Writing	-	-	-	-	-	-	-	8
Taught by Andrew Young	- Writing	-	-	-	-	-	-	-	12
Taught by Hugh Reid	- { Writing	-	-	-	-	-	-	-	11
	- { Arithmetic	-	-	-	-	-	-	-	6
									17
Taught by John Patrick	- Writing	-	-	-	-	-	-	-	6
									72
	Reading, Writing, &c. at other Evening Schools	-							72

Evening Sewing Schools.

Taught by Mrs. Tinnock	-	-	-	-	-	-	-	-	-	11
Taught by Mary Anderson	-	-	-	-	-	-	-	-	-	6
Total Reading, Writing, and Sewing at other Evening Schools										89

Architectural and Mechanical Drawing.

Taught by James Ingram at 15s. per quarter	-	-	-	-	-	-	8
At Evening Schools, other than the Company's	-	-	-	-	-	-	97
Brought down, from the Company's School	-	-	-	-	-	-	220
Day Schools, brought down	-	-	-	-	-	-	275
Total	-	-	-	-	-	-	592

The total number of workers under sixteen years of age employed in these factories for the year 1832 being 253, and supposing those at the night schools to be correctly given in by their teachers, it appears that 317 are attending to their education, which is sixty-four individuals more than the total number of workers of that age, but several are known to attend at twenty and upwards, whose early opportunities have been less fortunate.

Sabbath School, instituted 1813.

Number of pupils in 1832; boys, 120; girls, 180; total, 300. Number of classes, 17. Teachers give their services gratis. The attendance during the year has been in the proportion of seventeen to one.

Public Libraries in Catrine.

- 1.—OLD PUBLIC LIBRARY, instituted in the year 1814. Number of members, 72. Number of volumes, 566. Amount of contribution, 6d. each per quarter.
- 2.—SABBATH SCHOOL LIBRARY, instituted in the year 1817. Number of members (pupils and teachers), 317. Number of volumes, 520; value per cost price, 92l. 18s. 3d. Supported by donations and collections.
- 3.—MECHANICS' LIBRARY, instituted in the year 1825. Number of members, 20. Number of volumes, 72. Amount of contribution, 1s. each per quarter.
- 4.—NEW PUBLIC LIBRARY, instituted in the year 1829. Number of Members, 134. Number of volumes, 500. Amount of contribution, 1d. each per week.

No. 4.

STATEMENT OF ANNUAL COLLECTIONS, &c. for the Poor of the Parish of SORN, and Distributions made to them, for Years 1813 and 1832, including intervening Years.

[Population of the Parish of Sorn, per Census of Year 1831, 4,253. Valuation of the Parish of Sorn in Scotch Money, 5,411l. 7s.]

YEARS.	Collections, &c.	Voluntary Contributions.	Total received.	Distributions.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Balance due the Treasurer at the commencement of 1813	- - -	- - -	- - -	5 5 10½
In the year 1813	106 15 2¼	- - -	106 15 2¼	120 7 6½
1814	119 3 7¼	21 19 6½	141 3 1¼	120 6 1
1815	118 11 8½	- - -	118 11 8½	131 19 1
1816	116 7 1	22 10 9½	138 17 10½	131 18 5½
1817	110 12 4¾	41 8 1½	152 0 6¼	141 13 9½
1818	108 15 8½	6 5 0	115 0 8½	129 18 10½
1819	99 7 6¾	18 17 8	118 5 2¾	112 14 6
1820	137 5 11	6 7 7	143 13 6	120 14 5
1821	117 17 6¾	- - -	117 17 6¾	133 4 7½
1822	104 12 2½	- - -	104 12 2½	134 14 8
1823	105 13 10¾	39 10 11½	145 4 10¼	116 3 11½
1824	91 9 3¼	12 0 0	103 9 3¼	102 9 6½
1825	115 3 10¼	- - -	115 3 10¼	92 9 11¼
1826	106 17 1½	- - -	106 17 1½	100 16 4
1827	102 11 5½	- - -	102 11 5½	103 11 5
1828	117 16 7¾	- - -	117 16 7¾	103 19 2
1829	111 6 9¼	- - -	111 6 9¼	133 14 9½
1830	99 18 10¼	- - -	99 18 10¼	116 2 1
1831	98 7 0	3 9 7¼	101 16 7¼	111 0 2½
1832	89 1 8	40 5 8	129 7 4	127 5 1
Total for 20 years	2,177 15 6	212 14 11¼	2,390 10 5¼	2,390 10 5¼

I hereby certify that the foregoing is a correct statement of annual collections, &c. for the poor in the parish of Sorn, and of Distributions made to them, for the above specined period of time.

Sorn, 24th May 1833. ADAM SMITH, Session Clerk.

From the above statement it appears that in the last twenty years the heritors of the parish or Sorn have contributed 212l. 14s. 11¼d. or 10l. 12s. 9d. per annum, being a decimal of .471 of a penny. Not one halfpenny sterling per pound Scots of valuation per annum.

No. 5.

STATEMENT of the NUMBER of MEMBERS, INCOME, and EXPENDITURE of the CATRINE PROVIDENT FRIENDLY SOCIETY, from April 1832 till April 1833; exhibiting the average Amount of Sickness and other bodily Infirmary experienced therein for the above Period; distinguishing the Members employed in the Factory from those employed at other Occupations.

Total Number of Members.	Total Amount of Income.	Total Amount of Expenditure.	Number of Members employed in the Factory.	Average Amount of Sickness and other Infirmary to each Member employed in the Factory.	Number of Members engaged in Occupations unconnected with the Factory.	Average Amount of Sickness and other Infirmary to each Member unconnected with the Factory.
	£ s. d.	£ s. d.				
294	166 0 3½	138 10 4½	106	9 days 2 hours.	188	10 days 8 hours.

The Society's Stock at present is £125.

The above Society was instituted A.D. 1829, and remodelled and sanctioned in terms of the existing Friendly Society Act in 1832.

To the best of my belief the above statement is correct,

WILLIAM CRAWFORD, Preses.

No. 6.

STATEMENT of the NUMBER of MEMBERS, INCOME, and EXPENDITURE of the CATRINE FRIENDLY SOCIETY, No. 1. (instituted 22d May 1789), from March 1832 till March 1833, specifying the average Amount of Sickness or other bodily Infirmary in relation to Time during that Period; distinguishing the Numbers employed in the Factory from those employed at other Occupations.

Number of Members in the Society.	Amount of Income.	Amount of Expenditure.	Number of Members employed in the Factory.	Average Amount of Sickness or other Infirmary to each Member employed in the Factory.	Number of Members employed in Occupations unconnected with the Factory.	Average Amount of Sickness or other Infirmary to each Member unconnected with the Factory.
	£ s. d.	£ s. d.				
127	104 16 5½	103 5 4	46	12 days, 11 hours, 16 minutes	81	17 days, 23 hours, 24 minutes.

In addition to the above numbers, this Society paid a weekly allowance to nine superannuated members, whose average age is above seventy-eight years. Eight of these spent the prime of life in the factory, and although much debilitated by age and other infirmity, they still enjoy comparatively good health, and are able to walk about. One of these died recently at the advanced age of eighty-four years.

The above statements were taken from the Society's books, and are warranted correct.

JAMES YOUNG, Clerk to the Society
ALEXANDER BROWN, Preses.

A. 1.

Northern District.

APPENDIX to the REPORTS of Messrs. STUART and MACKINTOSH.

No. 1.

NOTE of PREMIUMS at PRESTONHOLME FACTORY.

As it is intended to increase the works at Prestonholme, in consequence of which an additional number of spinners and reelers will be wanted about the end of summer, a premium of one guinea will be paid to those now in the mill who remain till the following terms :—

- 1st. To every reeler not under engagement who remains here from this time till the 1st May 1834.
 - 2d. To every reeler under engagement who remains a year after her engagement is finished.
 - 3d. To every completely-taught spinner who remains till the 1st May 1834.
 - 4th. To every spinner now in charge of a frame, but not on full wages, who remains till 1st September 1834.
 - 5th. To every shifter now managing a frame, with assistance, who remains till the 1st November 1834.
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No. 2.

COMMUNICATION from Messrs. AYTOUN and SWAN to the COMMISSIONERS; dated
Kirkcaldy, 6th May 1833.

To the Honourable the Circuit Commissioners of the Factory Commission.

The undersigned take the liberty of stating what has occurred to them since the Commission examined their manufactories this morning.

In the first place, they think the instructions under which the Commissioners are acting should have been made public, that all concerned, masters as well as servants, might have seen what evidence they were entitled to bring under notice of the Commissioners.

In the second place, they think that the examinations of the workpeople (which they understand were taken on oath) should have been *read over afterwards* to the masters, so that they might, if necessary, have had an opportunity of suggesting questions for cross-examination of the servants; the more so as the answers to the queries by the masters were directed to be hung up in the mill, to be patent to the workers.

In the third place, as they conceive the inquiry now making is as to the comparative state of the workers in mills, and those in the same *status* in society in other classes of the community, gaining their bread by their daily labour; that this comparison cannot be made unless the Commissioners inquire into the state of young people employed in this quarter, such as in weaving, shoe-making, tailoring, and in dress-making.

Kirkcaldy, }
6th May 1833. }

JAMES AYTOUN.
WILLIAM SWAN.

No. 3.

LETTER from the FACTORY COMMISSIONERS to Messrs. AYTOUN and SWAN; dated
Kirkcaldy, 8th May 1833.—With their Answer.

Gentlemen,

Bell Inn, Kirkcaldy, 8th May 1833.

Having been yesterday engaged in visiting the mills in the country part of this district, it has not till now been in our power to reply to the statement which you gave us when you called here on the evening of the 6th.

(A.1.)

I 4

The

Northern District.

No. 1.

1st Rep. A. 1. p. 1.

No. 2.

1st Rep. A. 1. p. 11.

No. 3.

1st Rep. A. 1. p. 11.

Northern District.

No. 3.

The first observation contained in your statement refers to the special instructions under which we act, which you think ought to have been made public. But the Commission appointing us to inquire into the state and condition of children in factories, and into the effects of their employment on their morals and health, have been made public, and our inquiry has been strictly and in every case confined to the precise terms of the Commission. No reason occurs to us for communicating to you the hints or instructions, all limited by the words of the Commission, given us by the Central Board of Commissioners, and directing us to examine the witnesses whom we select on oath, which the Commission authorizes us to do, or to what points especially we should devote our attention. We put into your hands on the evening of the 6th a copy of the printed general instructions which we had just received from the General Board, and really cannot conceive on what grounds or for what purposes any of the proprietors of the spinning-establishments are desirous to see our correspondence with the General Board, containing the instructions which we have from time to time received from them; they could be of no possible use to the mill-owners, and are essentially and from their very nature private documents. It altogether surprises us that you should have remarked on us as withholding information, when, in point of fact, Mr. Stuart explained to Mr. Aytoun in writing, previously to the examination of his mill, and in reference to a letter which Mr. Aytoun had showed him from his correspondents at Dundee, requesting information as to our course of procedure, that the Commissioners "took witnesses promiscuously, or such as offer themselves, but no objection to examine those suggested by proprietors of factories, the whole number being necessarily limited, from the time when the investigation is to close." Accordingly, Mr. Stuart examined the only person suggested by Mr. Aytoun, and has of course forwarded with his Reports from hence a copy of the statement received from that gentleman to the Central Board. On the other hand, the mill-owners here, although they received the printed Queries from the Factory Commissioners on 30th April or 1st of May, have, from what cause I can only conjecture, prevented their workmen from making remarks to us on the answers of the mill-owners, by not having previously to our examination placed them in one of the rooms of their establishments, so that the workmen might have an opportunity of inspecting them during one whole day, as was directed in the communication from the Central Board.

Your second observation relates to the mode which we follow in conducting the examinations, without allowing you to cross-examine the witnesses. The dispatch which you know to be indispensably necessary in order to bring the inquiry to a close within the time limited, renders such a mode of proceeding impossible. Were cross-examination of servants by masters, and of course of masters by servants, allowed, the investigation which we completed in this town and at Kinghorn in one day could not, we are persuaded, have been finished in a week; and we do not see any ground for thinking that any beneficial effect would have resulted from adopting, especially in an inquiry so limited as the present, a plan so utterly irreconcilable with principle as that of allowing the cross-examination of one witness by another. If any instance of positive ill-treatment of any of the workers by any of the mill-owners or overseers had been stated to us, we should undoubtedly have made the evidence of the fact known to the mill-owner or overseer concerned, and have afforded ample opportunity for satisfactory investigation; but nothing of this description has been mentioned to us, nor have we any reason to suppose that it exists in this quarter.

With respect to your third observation, suggesting the propriety of our inquiring as to the comparative state of workers in mills and of persons of the same station in life employed in other works, we beg to inform you that we have from the commencement of the inquiry not failed to obtain all the information in our power on this subject, agreeably to the instructions of the Central Board, and that Sir David Barry had, before we received your letter, been engaged in procuring information as to the state of the colliers in this neighbourhood: he is employed in investigations of a similar description to-day.

We have only, in conclusion, to remark, that we have received no communication from any quarter whatever complaining of the mode of procedure we have adopted but from you; and we have therefore, as well as from the respect we entertain for you, answered your statement in detail, which it is not likely that we shall be able to do in similar cases, should they occur, owing to the time which the investigation itself necessarily requires. We hope, if you have communicated your statement to any of the mill-spinners here or elsewhere, that you will not fail to make this our answer known to them.

It has been from the beginning, and will continue to be to the end, our great object to conduct the inquiry in the most impartial manner, and with equal courtesy to all parties; we must, however, pursue it by acting invariably according to the terms of the Commission, and the special instructions given or to be given us by the General Board.

We have the honour to be,

Gentlemen,

Your most obedient servants,

(Signed)

JAMES STUART.

ROBERT MACKINTOSH.

D. BARRY.

James Aytoun and William Swan Esqrs.
Kirkaldy.

ANSWER

ANSWER of Messrs. AYTOUN and SWAN to the preceding Letter.

Northern District.

The undersigned acknowledge having received the communication which the Factory Commissioners did them the honour to address on the 8th current (in answer to the memorial presented on the 6th), but it was not delivered from the Bell Inn until mid-day, and only then put into the hands of Mr. Aytoun as he was taking coach at the inn-door, going from home, so that he had no opportunity of communicating with Mr. Swan for some days thereafter on the matter it contained. Had it been otherwise, and the Commissioners on the spot, the writers would have thought it necessary to enter into certain explanations which might now be unprofitable, particularly as the hurried manner in which the Circuit Commissioners are obliged to proceed seems to preclude that minute and satisfactory investigation which the important subject of their mission would, in the opinion of the undersigned, have required. They therefore have only to add that their forbearance does not arise from acquiescence.

Kirkaldy, }
16th May 1833. }

JAMES AYTOUN.
WILLIAM SWAN.

No. 3.

1st Rep. A. 1. p. 39.

No. 4.

NOTICE.

The Commissioners appointed by His Majesty for inquiring as to the employment of children in factories are now at the Royal Hotel here, and ready to communicate with all persons desirous to give them information or suggestions relative to the subject of the inquiry committed to them.

It is requested by the Commissioners, that previous to their inspection of the spinning-mills here, the answers to the queries sent by the Central Board of the Commission to the proprietors or masters of spinning-mills shall, along with the queries, be placed in one of the mill-rooms frequented by the workers, that they may peruse them for one whole day.

Letters addressed to them, either at the inn or at the post-office here, will meet with immediate attention.

Dundee, May 10, 1833.

No. 4.

1st Rep. A. 1. p. 14.

No. 5.

MILL HOURS.

The Commission appointed to examine into the effects of the mills and factories having arrived, it is of the utmost importance that all persons whose health has been impaired, or whose bodies have been mutilated, by and at the mills in Dundee and its suburbs, should report the same, because much depends upon their evidence for the carrying the Ten Hours Bill into effect.

Information will be received at the shops of

James Whyte, ironmonger, 193, Overgate;
Thomas Lamb, confectioner, Murraygate;
William Brown, printer, foot of Blackness Road;
John Mathewson, grocer, Overgate;
The Commercial Society, West Port;
And at the ante-room of the Camperdown Hall.

Subscriptions to defray expences will be thankfully received at the above places.

Dundee, }
Thursday, May 8, 1833. }

No. 5.

1st Rep. A. 1. p. 16.

No. 6.

CORRESPONDENCE between the FACTORY COMMISSIONERS and Messrs. SHIELL and SMALL, Writers, the Solicitors for the Mill-owners at Dundee.

1st Rep. A. 1. p. 22.

1. LETTER from Mr. STUART to Messrs. SHIELL and SMALL; dated Royal Hotel, Dundee, 11th May 1833.

Gentlemen,

Royal Hotel, Dundee, 11th May 1833.

I mentioned to you this morning that Paterson, Urquhart, and Stewart had re-asserted the truth of their testimony before the Committee of the House of Commons, on oath, and that James Simpson has given evidence of his being dismissed from Mr. Kinmond's mill for supporting a meeting of operatives in favour of Lord Ashley's Bill. I am aware, from what has passed this evening, of your having attended to the intimation I gave you verbally in the morning; but if it is necessary that I should give it in writing, that you may acknowledge, I have done so.

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2. LETTER

Northern District.

No. 6.

2. LETTER from Messrs. SHIELL and SMALL to the FACTORY COMMISSIONERS; dated New Inn, Entry, 12th May 1833.

Gentlemen,

New Inn, Entry, 12th May 1833.

We have had the honour to receive your communication of last night, on the subject of the factories.

The master flax-spinners of Dundee, through us, express the great regret which they feel at the very limited stay which you are to make in this town. There are upwards of thirty mills, and considerably above 4,000 people employed in them, independently of more than double that number who are engaged in manufacturing, all of whom ought at least to fall within the range of your inquiries. Under these circumstances, and as your residence here is limited to *three* days, the master spinners do not contemplate, indeed the thing is impossible, that so thorough and efficient an investigation can be made into the various objects of inquiry as the extensive and complicated nature of the trade, with the important interests of those so deeply interested, demand.

Our constituents have also to regret that the Commissioners feel it to be their duty to proceed in their investigation with shut doors, to the exclusion of the masters and others; this may certainly facilitate the inquiry in point of *time*, but it will lead to evils much more serious than this trifling advantage can compensate. By this mode of procedure the masters are deprived of an opportunity of reconciling inconsistencies, pointing out from their more extensive knowledge of the system, and locally, many points of material inquiry; and it is to be feared, with great deference to you, that in many instances misapprehension of the questions will occur, and consequently erroneous answers be given by individuals unaccustomed to be examined; and in others the inquiry may not embrace the whole range of the information promised by the worker, nor exhaust the special point in consideration.

These are evils of which our constituents have most seriously to complain; but while they do this they cannot but express their admiration of the indefatigable exertions of the Commissioners under such difficulties; and they wish it to be understood that these subjects of complaint are not mentioned for the purpose of throwing any obstacle or impediment in the way of a free and unrestrained inquiry; no limit is wished in this respect by the proprietors; on the contrary they are prepared to afford every facility to the labours of the Commissioners, and are only sorry that they cannot be sufficiently extensive.

We have the honour to be, &c.

3. LETTER from Mr. STUART to Messrs. SHIELL and SMALL; dated Dundee, 13th May 1833.

Gentlemen,

Dundee, 13th May 1833.

I have received your letter, of yesterday's date, to the Factory Commissioners. Although our stay here is necessarily limited to the period from the 9th to the 14th instant, we have now reason to think that our inspection and evidence relative to it will comprehend almost all of the thirty spinning-mills you mention; and that the material facts on the subject referred to us respecting those mills will be ascertained with sufficient accuracy. I am not aware that it would have been attended with any good effects, even if we had remained longer here, to have instituted an open investigation, in which the mill-owners and those employed by them were to appear in array against each other. We are persuaded our time will allow us to take any evidence as to material facts which you may still think it necessary to establish, because from the obliging and accommodating manner towards us in which you have hitherto conducted matters on the part of the mill-owners, we are confident that you will not occupy our time without good reason.

Exclusively of the persons examined by Sir David Barry and Mr. Macintosh, I have already, since coming to Dundee, received the written testimony of forty-five individuals, more than three fourths of whom have been pitched upon almost indiscriminately by myself at the various works inspected; and surely information respecting the state of the workers in point of health, education, and morals, and hours of labour, the chief points of investigation, can be satisfactorily obtained from such a mass of evidence, without the details and delay of an inquiry judicially conducted. One third of our time still remains, and shall of course be devoted zealously to the prosecution of our object. Although the period of our remaining here cannot be extended much beyond the time I have mentioned, you will find before we leave you, on considering the hours devoted by us to the inquiry here, that as much time has been actually given to it as if a whole week of the ordinary hours spent in business of this nature had been occupied. In reference to one part of your letter, permit me to observe that Sir David Barry has been engaged since he came here in ascertaining the condition of other classes of operatives, as well as of the workers at the spinning-mills.

I learn that Dean, who was examined before the Committee of the House of Commons, is, before we leave Dundee, to be here, in order, as I understand, to verify on oath his testimony before the Committee. I need not remind you of what I have told you from the beginning, that we were authorized to confront the parties in all cases in which the mill-spinners produced evidence in refutation of that received by the Committee. You witnessed several instances of our following that course on Saturday evening. If any instance of severe or cruel treatment to the younger workers had been brought forward, I should, as explained to you, have given you an opportunity of refutation or explanation. No such case has occurred; and the only instance where any thing like a charge was brought against

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an overseer was immediately communicated to you, and evidence on the other side brought forward by you.

I hope therefore that you will not, on reflection, be disposed to think that there is much reason to complain of the way in which the investigation has been carried on.

Will you excuse me for requesting you to let me know, merely because I am anxious to ascertain the fact for the Central Board, upon what authority you state that the number of persons employed in the spinning-mills here amounts to 4,000. The accounts sent from Dundee in the beginning of 1832 rated them at 1,762, and I have not heard any of the mill-owners whom I have seen state the number as much exceeding 2,000.

4. LETTER from MESSRS. SHIELL and SMALL to the FACTORY COMMISSIONERS; dated Dundee, 14th May 1833.

Gentlemen,

Dundee, 14th May 1833.

We were honoured with your communications of yesterday and this morning.

With regard to the concluding paragraph of the former, we have merely to say that in the number of the employed there mentioned was included the hecklers attached to the several mills; and that the statement was made, not with sufficient nicety or accuracy to form any authority for the reliance of the Central Board, as such did not seem necessary. If, however, a correct statement of the exact number of employed be required, we shall feel pleasure in procuring such.

We have the honour to be, &c.

QUERY, with REPLY, from MESSRS. CHALMERS and HACKNEY, Dundee.

What would be the objection (if any) to restricting the employment of children between the ages of nine and thirteen to six or eight hours in the day, and thus to work in two sets, according as the whole day's work might extend to twelve or sixteen hours (it is suggested that such a change of sets might be made at the hour of dinner-time, when the machinery is already stopped)?

Would a change of hands, so made, entail any waste or inferiority of work?

If so, describe the nature of such waste or inferiority.

Answer.—The employment of two sets of hands under thirteen years of age supposes the possibility of working the machinery sixteen hours a day; this is nearly impossible; it would be much too long to work hands of any age, and they could not continue at it; and even if it were attempted, the injury arising therefrom would be much greater to those above thirteen years of age than any benefit which would arise from the reduced hours to those below that age; and if the hours are continued at twelve and a half, as at present, or reduced to twelve, the wages of those under thirteen years (which are from 2s. 9d. to 3s. 9d. per week) would be insufficient for the support of both sets, and they would not get higher wages, for the employer would prefer to pay even additional wages to those above *thirteen* than to have two sets. There would be no check on those under thirteen *only* being worked six hours, for they would go half the day to one work and half the day to another. The pilfering of the material would be also much greater; and this is carried to a great height in Dundee, from the facility of disposing of it. There would be no objection on the part of the masters if the employment of children under twelve years of age were prohibited entirely, though it would operate as a hardship on their parents; but were this prohibition extended to those of thirteen years of age, it would be productive of much misery to that class, who are unable to keep their children idle until they attain that age.

There would be no waste or inferiority of work arising from a change of hands.

No. 7.

MEDICAL CERTIFICATES.

No. 7.

1st Rep. A.1. p.48.

I hereby certify, that I have professionally attended the servants employed at the works of Messrs. Milne, Cruden, and Co., Manufacturers, Gordon's Mills, for the last five years. That their health during that period has been as good as any class of labouring people generally enjoy. I cannot attribute the cause of dishealth, in any individual case, to their being employed during the night. That very little disease has prevailed amongst them; and that at present I have only four cases under treatment.

Old Aberdeen, }
10th May 1833. }

F. IRVINE,
Surgeon to General Dispensary, Old Aberdeen.

I do hereby certify, that I was employed nearly four years as medical attendant on the servants of Messrs. Milne, Cruden, and Co., and during the whole of that period I can safely say that I saw no peculiar disease arising from the effects of working in that establishment: upon the whole, their servants were remarkably healthy.

Aberdeen, 15th May 1833.

WILLIAM LESLIE, Surgeon.

No. 8.

Northern District.

No. 8.

1st Rep. A.1. p. 50.

DOCUMENTS received from Mr. STEVENSON, acting Partner of the Stanley Mill Company dated 22d May 1833.

1. RULES of the SOCIETY for relieving the DESTITUTE in STANLEY.

1st.—That this society shall be denominated "The Stanley Benevolent Society," having for its object to afford temporary relief to those whose circumstances may require it.

2d.—That such relief shall be always given in the shape of necessaries or cordials for the sick; and that those who have been distinguished for christian principles, frugality, and industry shall be regarded as particularly entitled to the society's assistance; and it is understood that the subscribers to this society shall always have a preferable claim.

3d.—That those receiving aid from any other society, or parochial relief, or whose wants in any other way are provided for, shall receive no benefit from this society, except upon a strong necessary case being made out to the committee.

4th.—That any subscriber of not less than one penny per fortnight shall be considered a member of this society, and have a voice in the management of its affairs.

5th.—That the business of the society shall be conducted by a preses, vice-preses, secretary, and treasurer, with a committee and visitors, all of whom shall be appointed by the society.

6th.—That the preses shall preside at all general meetings, and meetings of committee, and shall continue in office for a year. In the absence of the preses, the vice-preses shall preside.

7th.—That a new committee shall be appointed at every general meeting, but not more than six of the former ones shall go out of office: the committee to consist of twelve, and any six to be a quorum.

8th.—That the visitors, who shall be females, shall consist of fourteen; two for each of the seven districts into which the village and adjoining feus shall be divided; and that new visitors shall be elected at each general meeting. The duty of the visitors shall be to inquire into the circumstances of the poor in their several districts, and report to the committee.

9th.—The committee shall meet on Saturday, every fortnight, at half past seven P. M., to consider the representations that may be made by the visitors in behalf of persons in distress, and otherwise to manage the affairs of the society, agreeable to article 5th.

10th.—The treasurer shall keep a regular account and minute book of all his intromissions, which shall be submitted to the inspection of the society at every general meeting.

11th.—The society shall meet three times a year, on the first Monday of October, February, and June; and intimation of such meetings shall be given publicly. At these meetings the books and accounts of the committee shall be examined, a new committee appointed, and such measures to be taken into consideration as may be proposed for advancing the object and interests of the society.

12th.—That the funds of the society shall be collected by seven of the subscribers appointed for the purpose at each general meeting, one for every district, and that they shall go round once every fortnight to receive the subscriptions of the members.

13th.—No amendment of or addition to these rules shall be made but in a general meeting.

2. CERTIFICATES respecting STANLEY MILLS.

I do hereby certify, that during the nine months I have been surgeon to the cotton-mills at Stanley I have not observed that any of the complaints that have occurred amongst the people employed in these works could in any instance be attributed to the length of time they are engaged, or the nature of their occupation; and I am fully convinced that they enjoy as good general health as any class of the labouring community. Except those that were carried off by the cholera, only three died during the above period, out of nearly 900 persons employed in this factory, and these three were come to the age of maturity, and their diseases had no apparent connexion with the work in which they were employed; two of them having died of phthisis pulmonalis, and the other of hemoptysis. I can also certify that no case of deformity of body or limb in any of the people engaged in these mills have come under my observation since I have been in attendance upon them; and the great attention to cleanliness in the works, and to the comforts of all those employed in them, render the situation of the workers, in my opinion, in many respects decidedly preferable to that of any class of labourers in this country.

Given under my hand, at Stanley, this 8th day of May 1833.

ALEX. FISHER, Surgeon.

Gentlemen,

Perth, 21st May 1833.

Understanding that the Factory Commissioners are to visit the Stanley mills about this time, I take the liberty of expressing the high gratification it affords me to bring under their consideration the great expence you were at, and the unwearied attention you paid to the health and comfort of the operatives in your employment at Stanley during the period that the cholera was raging in the village and among your people, about twelve months ago. This I do from having had the best opportunity of being acquainted with, in consequence of your having engaged my professional services to assist your ordinary medical establishment during that period, and in consequence I attended as closely as my duties to my other patients would admit of.

Gentlemen,

I have the honour to be,

Your most obedient servant,

DAVID HALKET, Surgeon.

These

Messrs. Dennistoun, Buchanan, & Co.

These do certify, that the cotton-works at Stanley are a good deal connected with the parish of Redyorton, the chapel of ease there, and a great part of the village, being situated within the bounds of the parish, and that therefore I have had an opportunity of judging of the effect produced upon the morals and the health of the population of this district of the country by these works: That I was minister of this parish upwards of ten years before the present company were established there, during which period I made frequent but ineffectual applications to the heritors of the parish for the enlargement of the parochial church, as necessary for the religious accommodation of the parishioners: That I therefore regard as a blessing to the district the arrival of a company who have voluntarily erected a chapel of ease to secure the administration of religion to their people, who could not have attended, and could not have been accommodated in the established church: That the proprietors of the cotton-works have conferred a still more important benefit on the population of the district by endowing a clergyman to perform service in the chapel, under whose ministrations the morals of the people are placed under a more minute superintendence than they could possibly have been under the parochial clergy, situated at the distance of four and five miles: That the proprietors have also provided for the education of the youth of the place, by furnishing a capacious school-room, and endowing a teacher with a competent salary: That the children engaged in the works are regularly conducted in a body to religious worship on the Sabbath, either by the managing partner, or some of his confidential officials: That the children are uniformly treated with the greatest humanity and kindness, and every encouragement and assistance afforded their parents to give them a sound moral and religious education: That, if I am not to be considered as so competent a judge of the effect produced upon the health of the workers as a regular medical practitioner, there are yet some facts connected with the subject which I think I am quite competent to estimate: That there are a number of children employed in the works whose parents live, as it were, at my door; and that I have known no deterioration in their health since they were so employed: That, on the contrary, I am sensible of a decided improvement in the neatness and tidiness of their personal appearance since that period; and that these habits of neatness and cleanliness begin to extend themselves to the houses of their parents: And that I may add to this certificate that I am in no way connected with any of the proprietors of the cotton-works, or with any person employed therein, but by an interchange of civilities between parties necessarily brought somewhat into contact with one another. Given at Redyorton, under my hand, this 1st of May 1833.

Northern District.

No. 8.

WILLIAM LISTER, Minister.

Dear Sir,

Stanley, 20th May 1833.

As His Majesty's Commissioners when they visit Stanley may be desirous of obtaining information from every quarter regarding the education and character and general condition of the workers (especially of the youth) employed in your extensive factory, I have taken the liberty to state what has fallen under my observation since I became minister of Stanley, which you may communicate to the Commissioners if you think proper.

During my residence here I have had ample opportunity of becoming acquainted with the condition and character of a great proportion of the persons employed in the cotton-works, in my daily intercourse with them, and in my family visitations; and I have no hesitation in declaring it to be my decided conviction, that they are not surpassed in education and morality, and domestic comforts, by persons in the same rank of life in any part of the country. They have a healthy appearance, are comfortably fed and clothed, and diseases are not more frequent among them than among other classes of the community, the annual mortality for many years falling short of one in every sixty of the population. Crime is scarcely known; and theft is so rare that the banks of the river are covered with clothes by day and night, without any person to watch them: and even those offences against morality, which are supposed to be a necessary attendant upon a crowded population, being so infrequent, that seldom more than two cases of bastardy occur in the year in a population of nearly 2,000.

In point of education the inhabitants of Stanley will bear a comparison with any part of the country; almost every person can both read and write; and the exceptions, if there are any, must be ascribed to the previous neglect of the parents before coming to settle in Stanley, as a commodious school-room and an efficient teacher with a competent salary, have been provided by the company, and instruction is afforded to all at the very low rate of 2s. per quarter. Paupers and orphans being educated by their respective parishes, and the children of the more destitute by a society lately instituted to provide instruction and bibles for all within the place who cannot afford to pay for them. The usual practice is for parents to send their children to school from four years old until they are nine years of age; after which any deficiency in their education is supplied, or new and more advanced branches acquired, by attending the evening-school after mill-hours; many thus learning the languages, grammar, book-keeping, drawing, geography, algebra, and various branches of mathematics. A Sabbath-school is also taught by me, assisted by monitors, at which from 300 to 400 of the youth regularly attend; and there is also attached to the Sunday-school, for the benefit of the scholars, a library of several hundred volumes, chiefly religious and moral. The expences connected with this institution are wholly defrayed by the proprietors of the cotton-works. I may mention, also, that there is a small library in the village to which all have access by paying a trifling annual subscription. The proprietors of the cotton-works have

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also,

Northern District.

No. 8.

also, at great expence, erected and endowed a place of public worship in connexion with the church of Scotland, chiefly for the accommodation of their workers, in which divine service is regularly observed, and all the youth who choose to attend are accommodated with seats gratuitously. There are also in Stanley a number of associations, such as the Benevolent Society, the Gardeners Society, the Funeral Society, &c., whose object is to provide for the sick, the aged, and destitute, and by means of which much suffering and misery have been relieved and prevented.

These, sir, are a few circumstances connected with the condition and character and education of the inhabitants of Stanley, which have come more directly under my notice, as minister of the place, and which I am ready to verify in any manner that may be required. It is not my duty, nor do I profess myself competent, to decide whether such a reduction of the hours of labour in all factories of every description, from twelve to ten hours daily, as is proposed, would be beneficial or injurious to the health and morality of our population, to our mercantile superiority, and to the prosperity of the nation generally. Doubtless all labour is irksome, and when too long continued must be injurious; but judging from what I have seen in Stanley it does appear to me that the contemplated restriction is uncalled for in establishments similarly conducted; and I know that were such restriction to be accompanied, as it must necessarily be, by a corresponding reduction of wages, it would be unacceptable to almost every person employed in this establishment.

I have the honour to be, Sir,

Alex. Stevenson Esq.,
Stanley Mills.

Your obedient servant,

WM. MATHER, Minister of Stanley.

Stanley Cotton-mills, 22d May 1833.

Mr. Mather, having attended the Commissioners, informed them that he came here as minister in August 1832, and Mr. Fisher, surgeon, informed them that he came here in the same month.

WM. MATHER, Minister.

ALEX. FISHER, Surgeon.

My attention has been drawn to the operations in the cotton-spinning factories at Stanley since July 1831, when I became the minister of the parish in which they are situated; and I have had reason to admire the orderly manner in which every thing is carried on in them. All the departments of the business proceed without confusion or interference with each other. The number of individuals employed is little short of a thousand. These persons live chiefly in the village of Stanley, which is neatly built, clean, well aired, and beautifully situated on the banks of the Tay. They are regularly paid once a fortnight, and, by the provident care of their employers, they have the advantage of purchasing all the articles of food and clothing of the best quality and at the cheapest rate at which they can be afforded. Much attention is paid to the education of the young, and to the moral and religious instruction of all. The company carrying on the works provide a large and commodious school-house, and pay a salary to a talented and an accomplished teacher. This school is attended by upwards of 100 young people, who are taught in the best methods all the branches of useful knowledge; and it is examined annually by a committee of the presbytery of the bounds. The company have also built and endowed a chapel, in connexion with the established church of Scotland, and capable of accommodating 1,200 hearers; in this chapel an ordained clergyman regularly dispenses the Word and Sacraments of the Christian faith; and the pastor, besides being constantly resident among his people, observing and directing their manners, and teaching from house to house, superintends a Sunday-school, which is attended by nearly 400 young people of the village, and most of them employed at the works. The happy effects of all this judicious and benevolent attention are obvious in the cleanly and tidy habits, and the sound morality and pure religion, which prevail among the people, cases of scandal or of gross vice being exceedingly rare among them.

The whole of the above statement is the result of personal knowledge, and it is made under the entire conviction, that the Stanley works, as they are at present conducted, are a great blessing to the neighbourhood in which they are placed.

Manse of Auchtergaven, }
7th May 1833.

THOMAS NELSON,
Minister.

No. 9.

No. 9.

1st Rep. A. 1. p. 51.

MEMORIAL of FLAX SPINNERS near Blairgowrie.

To the Honourable the Commissioners appointed by His Majesty for inquiring as to the Factories of Great Britain.

Memorial for David Grimond, John M'Intosh, William Fife, David Rattray, David Cairncross, James Grimond, and John Morrice, Flax-spinners in and near Blairgowrie.

The memorialists are all proprietors and occupiers of certain flax spinning-mills on the river Ericht, near to Blairgowrie, and, as such, are deeply interested in the result of the

inquiry of the honourable Commissioners. They therefore take the liberty respectfully to submit to the Commissioners some facts in regard to their situation which they trust may meet with the attention of the honourable Commissioners. Northern District.

No. 9.

The memorialists beg leave particularly to state, that, until the recent parliamentary proceedings were instituted, with the view of shortening the duration of the working-hours, no complaint was ever made by those in their employment of the working-hours being too long, or that the health of any of them suffered from working these hours. The memorialists venture to affirm that the workers would be the first to complain of the hours being shortened, because they are in the meantime misled by a few designing and officious individuals, who represent to them that they will have the same wages as at present, with much more of spare time within their own hands, which, in so far as the wages are concerned, cannot be the case. The memorialists do firmly believe, that the shortening of the hours, so as the workers will be free by seven or eight o'clock in the evening, so far from improving their morals or health, may prove injurious to them both. The memorialists employ very few children under ten years of age at their works, and these only when their parents urge them to take the children. It is also worthy of remark, that these children are generally those of their managers or overseers, who are so satisfied that the health of their children does not suffer from such employment that they urge the memorialists to employ them. These overseers have good wages, and are quite able to dispense with their children attending mills. The personal labour is but light, and all the workers are accommodated with seats, which they use occasionally, so that the employment is neither too sedentary on the one hand, nor too fatiguing, by standing long in an upright posture, on the other hand. The workers, too, are in general at liberty to go out into the air when they choose.

The memorialists beg respectfully to state, that they conceive the adult workers are quite able to protect themselves, in making agreements as to the duration of their labour; and in the cases of children, their parents are their natural and best guardians in this as in other respects. They therefore do deprecate all legislative interference as impolitic and unnecessary, and as tending to disturb, not only the relation of master and servant, but the more tender one of parent and child.

But the memorialists would beg to bring under the notice of the Commissioners the peculiar hardships to which they might be subject, and the ruinous consequences which might ensue to them, if Lord Ashley's Bill were to be passed into a law. Their works are all propelled by water-power, and are often interrupted by floods and frosts, so as they cannot commence working often till the day is far advanced. By the Bill they would not be allowed to continue their work later than till eight o'clock in the evening, and, instead of ten hours, they often could not work six, and that for weeks together. In such circumstances it is clear they could not compete with others not subject to such contingencies, and their whole profits would not pay the workers. The capital which they have expended on buildings, &c. would be lost, and the whole persons they now employ thrown out of employment. They would therefore respectfully suggest, that, if a law is to be passed, flax-mills propelled by water should be excepted from its operation, or such provision made as would suit the peculiarity of their situation.

The memorialists may also be permitted to remark, that Lord Ashley's Bill is so penal in its nature against the occupiers of mills as to render their situation extremely hazardous, and may deter many persons of capital from exposing themselves to such penalties; should the penal clauses be continued, no master will be in safety, for a discontented servant will at once expose himself to a trifling mutilation in order to punish his master and benefit himself, without any chance of the master recovering his expences, though vexatiously incurred.

It cannot escape the notice of the honourable Commissioners, that all restrictions upon the productive power of the country are impolitic. The proposed law will occasion a great diminution in the supply of manufactured goods, in the first instance, and afterwards a sufficient supply can only be produced at an increased expence, by extension of the works. Under such circumstances it will be impossible for the British manufacturer to compete with foreigners, and a most important branch of British trade may be lost.

The memorialists, on the whole, while they humbly conceive no law on the subject is either politic or necessary, yet, if a law is to be passed, it ought, in their opinion, to be simple in its nature, merely prohibiting the undue labour of children under twelve years of age in factories, or perhaps excluding them altogether, to which the memorialists, as individuals, would have no objections.

The memorialists may state, that they are prepared to prove their averments to the honourable Commissioners, in so far as regards the interruptions from frosts and floods at their works, as also the general health of the workers.

Blairgowrie, 20th May 1833.

JOHN MORRICE.
JAMES GRIMOND.
WILLIAM FIFE.
DAVID CAIRNCROSS.

DAV. RATTRAY.
JOHN M'INTOSH.
DAVID GRIMOND.

No. 10.

Northern District.

MEMORIAL of Mr. SMITH of DEANSTON COTTON WORKS, Perthshire.

Unto the Honourable His Majesty's Commissioners on the Factory Inquiry.

No. 10.

1st Rep. A.1. p. 64. The Memorial of James Smith, one of the Proprietors of and resident Manager at Deanston Cotton Works:

Respectfully sheweth,

That in consequence of a severe visitation of the disease called Influenza, now prevalent in the country, the sickness amongst the workpeople at Deanston from that cause alone, during the last two weeks, was excessive, whereby the greater number of the workpeople have suffered more or less: That above a hundred people are still absent, and many present are still only convalescent, and many are tending towards the disease: That from this cause much of the machinery has been stopt, and the general system of the work much deranged: That there was difficulty in getting people to bring forward the necessary statements: And that upon the whole the memorialist is afraid that the aspect of the establishment will not be so satisfactory to your Honours as in other circumstances it might have been, and of which state of matters your memorialist has conceived it to be his duty to apprise your Honours.

With the utmost respect,

22d May 1833.

JAMES SMITH.

2. STATEMENT of SICKNESS and WOUNDS of WORKERS at DEANSTON COTTON WORKS, Perthshire, during the Year 1831.

DISEASES.		No. of Cases.			Causes.				Days sick.		Results.		
		Males.	Females.	Total.	Contagious.	Spontaneous.	Accidents at Works.	Accidents out of Works.	Amount.	Average.	Cured.	Relieved.	Died.
1	Headache -	3	38	41	—	41	—	—	244	6	40	1	—
2	Catarrh -	7	39	46	—	46	—	—	274	6	46	—	—
3	Boils -	1	7	8	—	8	—	—	40	5	8	—	—
4	Cynanche Parot. -	1	10	11	—	11	—	—	63	5 $\frac{3}{4}$	11	—	—
5	Hepatitis -	—	3	3	—	3	—	—	27	9	3	—	—
6	Œdema -	—	2	2	—	2	—	—	16	8	2	—	—
7	Spasms -	—	1	1	—	1	—	—	7	7	1	—	—
8	Rheumatism -	—	3	3	—	3	—	—	12	4	—	3	—
9	Sprain -	—	5	5	—	5	—	—	23	4 $\frac{2}{3}$	5	—	—
10	Toothache -	1	2	3	—	3	—	—	18	6	3	—	—
11	Gastrodynia -	1	1	2	—	2	—	—	12	6	2	1	—
12	Erysipelas -	—	3	3	—	3	—	—	20	6 $\frac{2}{3}$	3	—	—
13	Ophthalmia -	1	1	2	—	2	—	—	8	4	2	—	—
14	Diarrhœa -	4	13	17	—	17	—	—	119	7	17	—	—
15	Bruises -	1	6	7	—	7	—	7	40	5 $\frac{4}{7}$	7	—	—
16	Hysteria -	—	2	2	—	2	—	—	8	4	—	2	—
17	Debility -	1	2	3	—	3	—	—	53	17 $\frac{2}{3}$	—	3	—
18	Influenza -	2	22	24	—	24	—	—	133	5 $\frac{1}{2}$	24	—	—
19	Ulcer -	—	3	3	—	3	—	—	12	4	—	3	—
20	Worms -	—	3	3	—	3	—	—	21	7	3	—	—
21	Dyspepsia -	4	5	9	—	9	—	—	77	8 $\frac{2}{3}$	5	4	—
22	Swelled Glands -	—	1	1	—	1	—	—	3	3	—	1	—
23	Colic -	—	1	1	—	1	—	—	9	9	1	—	—
24	Morbus Coxarius -	—	1	1	—	1	—	—	14	14	1	—	—
25	Rosiola -	—	1	1	—	1	—	—	11	11	1	—	—
26	Abscess -	1	4	5	—	5	—	—	24	4 $\frac{2}{3}$	5	—	—
27	Pyrosis -	—	2	2	—	2	—	—	6	3	—	2	—
28	Wounds -	1	2	3	—	3	2	1	26	8 $\frac{2}{3}$	3	—	—
		29	183	212	—	212	2	8	1,320	6 $\frac{1}{4}$	192	20	—

In addition to the foregoing List, there was one case of pulmonary consumption; viz. Ann M'Intyre, throstle-spinner, aged about twelve years, who died after seventy-four days illness.

No case of sickness of less than three days duration is included in the foregoing statement, these being chiefly the milder female complaints, and slight colds; and eighty-nine of the included cases were not of more than three days duration. Two of the wounds were caused by the machinery; one girl had the ring-finger of her right hand amputated at its metacarpal connexion; another girl had the first phalanx of a finger of the left hand amputated.

Amongst 222 males 29 cases of sickness have occurred.
423 females 183 do. - do.

645

212

One case of sickness amongst $7\frac{6}{10}$ of the males.Do. - do. - $2\frac{3}{10}$ of the females.

Do. - do. - 3 of the workers.

Northern District.

No. 10.

Cases of Sickness among all the Workers.

300 workers, aged between 10 and 20 years, 146 cases, 49 per 100 workers.

222 do. - do. 20 and 30 - 52 - 24 do.

65 do. - do. 30 and 40 - 10 - 15 do.

28 do. - do. 40 and 50 - 3 - 11 do.

21 do. - do. 50 and 60 - 1 - 5 do.

9 do. - do. 60 and upwards - - - do.

645

212

33

Out of 292 residing in Doune ⁽¹⁾ and Buchany ⁽²⁾, 113 cases, 38 per 100 workers.123 - do. - Murdochston ⁽³⁾ - 36 - 29 do.230 - do. - Deanston ⁽⁴⁾ - 63 - 27 $\frac{1}{2}$ do.

645

212

33

Note.—⁽¹⁾ Doune is a village 1 mile distant from the works.⁽²⁾ Buchany - do. - 2 - do. - do.⁽³⁾ Murdochston - $\frac{1}{2}$ - do. - do.⁽⁴⁾ Deanston nearly adjoins the works.

JAMES SMITH, Manager.

3. STATEMENT of SICKNESS and WOUNDS of WORKERS at DEANSTON COTTON WORKS, Perthshire, during the Year 1832.

DISEASES.		No. of Cases.			Causes.				Days sick.		Results.		
		Males.	Females.	Total.	Contagious	Spontaneous.	Accidents at Works.	Accidents out of Works.	Amount.	Average.	Cured.	Relieved.	Died.
1	Rheumatism -	2	13	15	—	15	—	—	184	$12\frac{2}{10}$	15	—	—
2	Diarrhoea -	5	10	15	—	15	—	—	74	5	15	—	—
3	Burn -	1	5	6	—	6	—	—	97	$16\frac{1}{10}$	6	—	—
4	Catarrh -	11	43	54	—	54	—	—	456	$8\frac{4}{10}$	54	—	—
5	Erysipelas -	1	6	7	—	7	—	—	71	$10\frac{1}{10}$	7	—	—
6	Headache -	5	36	41	—	41	—	—	265	$6\frac{6}{10}$	41	—	—
7	Chilblains -	—	4	4	—	4	—	—	24	6	4	—	—
8	Abscess -	1	14	15	—	15	—	—	79	$5\frac{3}{10}$	15	—	—
9	Cynanche Parot. -	—	5	5	—	5	—	—	22	$4\frac{4}{10}$	5	—	—
10	Urticaria -	—	1	1	—	1	—	—	7	7	1	—	—
11	Contusion -	6	2	8	—	8	3	5	58	$7\frac{2}{10}$	8	—	—
12	Wounds -	3	9	12	—	12	10	2	118	$9\frac{8}{10}$	12	—	—
13	Bruises -	3	2	5	—	5	—	—	23	$4\frac{6}{10}$	5	—	—
14	Fever -	1	2	3	—	3	—	—	25	$8\frac{3}{10}$	3	—	—
15	Hepatitis -	2	5	7	—	7	—	—	61	$8\frac{7}{10}$	7	—	—
16	Ophthalmia -	8	9	17	—	17	—	—	146	$8\frac{6}{10}$	17	—	—
17	Gastrodynia -	—	3	3	—	3	—	—	12	4	3	—	—
18	Flatus -	—	1	1	—	1	—	—	3	3	1	—	—
19	Emansiomensium -	—	5	5	—	5	—	—	61	$12\frac{2}{10}$	5	—	—
20	Colic -	2	3	5	—	5	—	—	42	$8\frac{4}{10}$	5	—	—
21	Ulcer -	—	4	4	—	4	—	—	53	$13\frac{2}{10}$	4	—	—
22	Hysteria -	—	2	2	—	2	—	—	40	20	2	—	—
23	Herpes zoster -	1	—	1	—	1	—	—	6	6	1	—	—
24	Scrofulous -	1	—	1	—	1	—	—	4	4	—	1	—
25	Dyspepsia -	5	9	14	—	14	—	—	112	8	14	—	—
26	Sprain -	2	4	6	—	6	—	—	67	$11\frac{1}{10}$	6	—	—
27	Psora -	—	1	1	—	1	—	—	11	11	1	—	—
28	Pyrosis -	—	2	2	—	2	—	—	16	8	2	—	—
29	Swelled Glands -	2	2	4	—	4	—	—	62	$15\frac{6}{10}$	4	—	—
30	Consumption -	—	2	2	—	2	—	—	277	$138\frac{5}{10}$	—	—	2
31	Pain of Side -	1	1	2	—	2	—	—	51	$25\frac{5}{10}$	2	—	—
32	Fistula in Ano -	—	1	1	—	1	—	—	6	6	1	—	—
33	Morbus Coxarius -	—	1	1	—	1	—	—	47	47	1	—	—
34	Gum-boil and Lock-jaw -	—	1	1	—	1	—	—	59	59	1	—	—
35	Dysentery -	—	1	1	—	1	—	—	14	14	—	—	1
36	Organic Disease of Brain -	—	1	1	—	1	—	—	124	124	—	—	1
		63	210	273	—	273	13	7	2,677	$9\frac{8}{10}$	268	1	4

(A.1.)

L

Northern District.

No. 10.

No case of sickness of less than three days duration is taken into account in the foregoing statement, these being chiefly the milder female complaints, and slight colds; and ninety-six of the included cases were of not more than three days duration each. The severest injuries by the machinery were in the cases of Bell Henderson, spinner, first phalanx of fore-finger of right hand amputated; and Janet Robertson, spinner, cured, but left a stiff joint on middle finger of right hand.

Died.

April.	-	Marion Stewart, spinner	-	aged about 16	-	Consumption.
June.	-	Grace Carmichael, weaver	-	18	-	Do.
Aug.	-	Christian Rutherford, do.	-	28	-	Dysentery.
Oct.	-	Mary Bain, piecer,	-	14	-	Disease of Brain.

Amongst 240 males 63 cases of sickness have occurred.

455 females 210 - do. - do.

695 273

One case of sickness amongst $3\frac{2}{10}$ of the males.

Do. - do. - $2\frac{2}{10}$ of the females.

Do. - do. - $2\frac{6}{10}$ of all workers.

Cases of Sickness divided amongst all the Workers.

321 workers, aged between 10 and 20 years, 149 cases, 46 per 100 workers.

252 do. - do. 20 and 30 - 107 - 42 - do.

71 do. - do. 30 and 40 - 14 - 14 - do.

23 do. - do. 40 and 50 - 2 - 8 - do.

20 do. - do. 50 and 60 - 1 - 5 - do.

8 do. - do. 60 and upwards - - - do.

695

273

39

Out of 283 residing in Doune⁽¹⁾ and Buchany⁽²⁾, 121 cases, 43 per 100 workers.

118 - do. - Murdochston⁽³⁾ - 51 - 43 - do.

294 - do. - Deanston⁽⁴⁾ - 101 - 34 - do.

695

273

40

Note.—⁽¹⁾ Doune is a village 1 mile distant from the works.

⁽²⁾ Buchany - do. - 2 - do. - do.

⁽³⁾ Murdochston do. - $\frac{1}{2}$ - do. - do.

⁽⁴⁾ Deanston nearly adjoins the works.

JAMES SMITH, Manager.

4. — MEANS OF EDUCATION AT DEANSTON COTTON WORKS, Perthshire.

DAY SCHOOL (Mr. James Johnston, Teacher).—Supported by fees from scholars; Deans-ton Works furnishing schoolroom and fire. On the annual examination by a committee of the Presbytery of Dunblane, on the 29th March 1833, there were 109 scholars; of these, 92 at English, 11 English grammar, 40 writing, 17 arithmetic, 11 geography and use of the globes. Fees per quarter, reading 2s. 6d.; writing, 2s.

EVENING SCHOOL (Mr. James Johnston, Teacher, assisted by Monitors).—Supported by Deans-ton Works, and attended by young persons employed during the day at the factory. All under sixteen years of age are obliged to attend, unless a reasonable excuse can be given. The average number of scholars during a year is about 162; 130 of whom at English, 84 writing, 26 at arithmetic, and 2 at mathematics.

SABBATH EVENING SCHOOL (Mr. James Johnston, Teacher).—The Deans-ton Works give schoolroom, fire, and lights. The scholars read the Scriptures, repeat psalms or para-phrases, and are examined on the Shorter and Watts's Catechisms. The average number of scholars during last year was 60.

In all of the above schools on the day of public examination by the committee of Pres-bytery, suitable rewards of merit are presented to deserving scholars.

22d May 1833.

JAMES SMITH, Manager.

No. 11.

Northern District

MINUTES of PROCEEDINGS at the George Hotel, Glasgow, 27th May 1833.

No. 11.

PRESENT,

1st Rep. A. 1. p. 69.

Messrs. Thomas Steele, Yarn Dresser,
James Dunn, Cotton Spinner,
Joseph Dove, Cotton Spinner,
Daniel Macaulay, Power Loom
Tenter,
William Smith, Cotton Spinner,
Alex. Keillor, formerly Clerk to
Power Loom Factory,

Messrs. Charles Rattray, Calico Printer,
George Donald, Cotton Yarn
Dresser,
Daniel Wright, Cotton Spinner,
Thomas Atkinson, Do.
James Gibb, Do.

Mr. Steele, as one of the above deputation, offered to the Commissioners a paper, which he stated to be a protest prepared by them, by the desire of a general meeting of operatives of three trades, — of cotton-spinners, yarn-dressers, and power-loom workers, held on against the issuing of any commission, and against their proceedings as Commissioners. The Commissioners acquainted the deputation, that they were quite ready to show that their proceedings were conducted in the way the best calculated to forward the object of their appointment; and that they were quite ready to receive any suggestion from the deputation collectively or individually, and to examine every witness whom they might wish to have examined on the subject of the inquiry; but that they could not discuss with them the propriety of their appointment as Commissioners; and if any paper of protest was offered on that ground, they would forward it to the Secretary of State for the Home Department, without taking any intermediate notice of it. The deputation then produced the paper of protest, which the Commissioners accordingly resolve instantly to forward to the Secretary of State.

Mr. Macaulay then mentioned that the deputation would report proceedings to a meeting of delegates to be held this evening, and would inform the Commissioners of what takes place at half past nine to-morrow morning.

(Signed)

J. S.
T. S.

No. 12.

No. 12.

MINUTES of PROCEEDINGS at the George Inn, Glasgow, 28th May 1833.

1st Rep. A. 1. p. 71.

Present — The Factory Commissioners; and of the Deputation of the Short Time Committee, Mr. Thomas Steele, Mr. Daniel Macaulay, and Mr. James Dunn.

The Deputation produced minutes of their own appointment, dated 17th April, 20th April, and 13th and 17th May, and also of a meeting of delegates held last night.

Mr. Macaulay then produced the protest directed by the meeting of delegates to be presented by them to-day to the Commissioners; which having been considered by the Commissioners, they informed the Deputation, that so far as concerned the protest tendered yesterday, the real state of the fact would appear from the minute then made out; and that with respect to the protest now offered, the Commissioners have merely to remind the Deputation that it rested with themselves alone to forward suggestions or to propose witnesses; that the Commissioners were ready to afford them every facility and opportunity to do so; that with respect to the mode followed by the Commissioners in taking evidence, they had adopted the only arrangement by which they could be enabled to bring the inquiry to a conclusion within the period to which it was necessarily limited, in order that Lord Ashley may proceed with his Bill during the present session of parliament; that it was obviously unfit (putting out of view how irreconcilable it was to principle to allow the cross-examination of one witness by another) that mill-owners should be cross-examined by operatives, and operatives by mill-owners; and finally, that the Commissioners were satisfied that they would be enabled to procure a greater mass of useful evidence in the way they had pursued than in any other way that could be devised, consistently with the short time within which the investigation must be completed.

(Signed)

J. S.
T. S.

Northern District.

No. 13.

No. 13.

LETTER from Mr. STEELE to the FACTORY COMMISSIONERS, and Mr. STUART's ANSWER thereto.

1st Rep. A. 1. p. 84.

Gentlemen,

The Committee have instructed me to intimate, that after consulting the delegates of the various factories in this neighbourhood respecting a general inspection of the factory workers on Saturday afternoon, they are of opinion that to gather together so many in a public place would occasion the public to collect in great numbers, and defeat any arrangements that might be previously made to preserve order, as well as prove annoying to you; and besides, after our formally protesting against the necessity of further inquiry, and the irritation prevalent among the factory workers from the delay and positive disappointment in not now enjoying the benefits of the Ten Hours Bill, the committee are apprehensive that something more serious than mere annoyance might be the consequence of bringing forward a great concourse who may have just received their wages, and perhaps indulged themselves in the deadening potions which long and incessant toil often provokes to, when opportunity serves.

With these explanations, and thanking you for the attention which you have given to the business in which you, contrary to our will, have been engaged, and also expressing our satisfaction for the open and candid examinations of Sir D. Barry,

The Honourable the Commissioners
on the Factories.

I am, Gentlemen,
In the name of the Committee,
Your obedient servant,
(Signed) THOS. STEELE.

Sir,

George Hotel, Glasgow, 31st May 1833.

I have this morning received your letter, informing the Commissioners that the intended assemblage of the young factory workers to-morrow afternoon is not now to take place.

I am anxious that you and your committee should now lose no time in giving us such farther suggestions as you may think important. I shall be at home this evening at half past seven, and ready to communicate with you, or to take the evidence of any individual or individuals whom you may propose. If there are any factories which you wish me to inspect and report upon, rather than others, your wish shall be attended to; but be so good as notice, that our stay here will now necessarily be very limited.

Mr. Thomas Steele,
or the Members of the Short Time Committee.

I am, Sir,
Your most obedient servant,
(Signed) JAMES STUART.

No. 14.

No. 14.

1st Rep. A. 1. p. 93.

POPULATION of CATRINE, per Census for 1832.

Married men	-	-	Householders	-	365	
Married women	-	-	Ditto	-	376	
Widowers	-	-	Ditto	-	37	
Widows	-	-	Ditto	-	117	
Single men	-	-	Ditto	-	18	Number of families - 615
Single women	-	-	Ditto	-	67	
Young persons	-	-	Male	-	754	Proportion of persons to each family } $4\frac{1}{2}$
Ditto	-	-	Female	-	941	
Lodgers	-	-	Male	-	13	
Ditto	-	-	Female	-	28	
					2,716	

SECTARIANS	-	-	{	Presbyterians of the Established Church	-	2,142
				United Secession	-	421
				Antiburghers	-	92
				Cameronians	-	18
				Episcopalians	-	12
				Catholics	-	18
				Independents	-	3
				Baptists	-	2
				Unitarians	-	8
					2,716	

Northern District.

OCCUPATIONS.

No. 14.

Auctioneer and Land Surveyor	-	1	Brought forward	-	273
Barber	-	1	Pirn Fillers	-	60
Brewers	-	3	Painters	-	2
Bakers	-	6	Painters of Snuff Boxes	-	9
Butchers	-	8	Plasterer	-	1
Bellman (Town Crier)	-	1	Quarrier	-	1
Carters and Carriers	-	16	Road Contractor	-	1
Cloth Merchants	-	6	Snuff-box Makers	-	14
Clockmaker	-	1	Smiths	-	8
Confectioners	-	3	Sewing Mistress	-	1
Cooper	-	1	Shoemakers	-	46
Corset-maker	-	1	Shoebinders	-	12
Church Officer	-	1	Scavenger	-	1
Cow-feeder	-	1	Sawyers	-	3
Dyer	-	1	Surgeons and Druggists	-	2
Flax-dresser	-	1	Spirit Dealers	-	5
Gardeners	-	2	Slaters	-	3
Grocers	-	10	Servants (Male)	-	8
Grocer and Spirit Dealers	-	8	Ditto (Female)	-	25
Hand Sewers	-	61	Sexton	-	1
Hawkers	-	6	Student	-	1
Heddle Carters	-	7	Straw Hat Makers	-	6
Innkeepers	-	5	Spinners (Lint and Wool)	-	4
Keeper of Lodger	-	1	Teachers	-	9
Knitters of Stockings	-	3	Tin Smiths	-	5
Labourers	-	59	Thatcher	-	1
Manufacturers Agents	-	2	Tailors	-	17
Midwife	-	1	Toll-keepers	-	2
Minister (Chapel of Ease)	-	1	Weavers	-	110
Masons	-	33	Wrights	-	21
Mantua-makers	-	21	Washerwomen	-	11
Omnicraft	-	1	Waste Pickers (at home)	-	24
		273			687
Living on their property	-	-			21
Invalids	-	-			45
Insane	-	-			3
Blind	-	-			3
					759

Catrine, 11th May 1833.

MATTHEW M'CARLIE.

No. 15.

Northern District.

MARRIAGES and NATURAL CHILDREN among the SERVANTS in GRANDHOLM MILLS,
during the Year ending 30th April 1833.

No. 15.

SPINNING MILLS.—346 Females, from 15 to 45 years of age.—The females, when with child, are dismissed for a twelvemonth, and the father treated in the same manner, if employed here, unless they marry.

1st Rep. A. 2. p. 37.

MARRIAGES.				Female Delinquencies.
Jane Brown	-	to David Hutcheon, both at the mills	-	—
Jane Smith	-	to a tailor in Aberdeen	-	—
Prudence Campbell	-	to a weaver in Aberdeen	-	—
Isabel Morison	-	to a house-carpenter in the village	-	—
Janet Gunn	-	to a country road-maker	-	—
Elizabeth Hardie	-	to Alexander Scott, both at the mills	-	—
Ann Allan	-	to Alexander Reid, ditto	-	—
Grace Laing	-	to a quarrier in the village	-	—
Marg ^t Copland	-	to James Webster, both at the mill; girl with child	-	1
Jane Chrystie	-	to James Clark, both at the mills; woman 34 years at the mills	-	—
Mary Piggot	-	to John Towse, both at the mills; girl with child	-	1
Sarah Booth	-	to James Smith, both about the work; the girl had had a child to James Smith about two years before	-	—

12 Marriages.

NATURAL CHILDREN.				Female Delinquencies.
Sarah Arnot	-	to a soldier. S. A. dismissed	-	1
Isabel Sharp	-	to a worker at the company's bleachfield. I. S. dismissed	-	1
Mary Guthrie	-	to a soldier. M. G. four or five months gone with child before entering the mills. Dismissed	-	1
Agnes Henderson	-	to John Forbes, both at the mills. Both dismissed	-	1
Ann Fraser	-	to a man in Aberdeen. A. F. dismissed	-	1
Ann Singer	-	to a man said to be dead. Second child. A. S. dismissed	-	1

6 { Unmarried women that had
had natural children.

Total Delinquencies - 8

The mills are mostly old establishments, and the majority of the females have been bred in mills from infancy.

WEAVING MILLS.—179 Females, from 15 to 45 years of age.—Where the females, when with child, have not been dismissed.

MARRIAGES.				Female Delinquencies.
Elizabeth M ^c Garthy	-	to a man not employed here	-	—
Mary M ^c Kebb	-	to do.	-	—
Marg ^t M ^c Kay	-	to do. Girl with child	-	1
Bathia M ^c Kenzie	-	to do.	-	—
Helen Smith	-	to George Spalding, spinning-mills. Girl with child. G. S. had left the work before marriage	-	1

5 Marriages.

NATURAL CHILDREN.				Female Delinquencies.
Eliza Clark	-	to a man not employed here	-	1
Marg ^t Davidson	-	to John Forbes. A double delinquent. See spinning-mill	-	1
Mary Tait	-	to a man not employed here	-	1
Marg ^t Brander	-	to do.	-	1
Eliza Gavin	-	to do.	-	1
Diana Annand	-	to do.	-	1
Marg ^t Abercromby	-	to do.	-	1
Sybilla Cumming	-	to do.	-	1
Marg ^t M ^c Kay	-	to do.	-	1
Cath ⁿ Monro	-	to do.	-	1

10 { Unmarried women that have
had natural children.

Total Delinquencies - 12

This work is an entire new erection, since 1826; and the females consist chiefly of grown-up girls from the country.

Grandholm Works, 20th May 1833.

A. C.

(A. 2.)

L 4

Northern District.

No. 15.

GRANDHOLM WORKS.—SPINNING-ROOMS.

ABSENT HANDS from SICKNESS, real or pretended, and all other Causes.—The other Causes are not, perhaps, above $\frac{1}{2}$ per cent.

		SERVANTS.				Per Cent. absent.					
		No. 2.	No. 3.	No. 4.	No. 5.	Total.	Wet. No. 2.	Dry. No. 3.	Dry. No. 4.	Wet. No. 5.	Nearest Average.
1832.											
May	- 3	72	91	91	59	313	4	4	2	3	3½
	10	71	94	91	58	314	5	4	5	4	4½
	17	69	93	91	60	313	4	3	3	4	3½
	24	74	90	94	63	321	4	3	5	3	3¾
	31	74	90	95	61	320	4	4	5	3	4
June	- 7	74	93	93	63	323	4	5	5	4	4½
	14	74	96	97	57	324	2	5	5	5	4¾
	21	73	98	95	57	323	2	2	5	5	3½
	28	72	92	98	63	325	2	4	4	3	3¾
July	- 5	74	100	102	57	333	4	4	5	4	4¼
	12	74	98	97	63	332	4	3	5	7	4¾
	19	75	95	99	65	334	3	2	2	6	3¼
	26	72	94	99	67	332	1	2	2	9	3½
August	- 2	74	91	103	58	326	3	2	3	5	3¼
	9	73	96	99	64	332	4	6	4	3	4¼
	16	73	93	100	65	331	4	5	2	4	3¾
	23	70	96	100	75	341	2	5	5	2	3½
	30	70	96	97	71	334	2	4	6	8	5*
September	6	76	94	103	70	333	8	4	12	9	8¼*
	13	73	94	102	66	335	12	7	15	17	12¾*
	20	71	99	94	72	336	8	9	9	8	8½*
	27	75	98	97	82	342	5	10	10	6	7¾
October	- 4	74	93	98	78	343	7	12	8	6	8¼†
	11	77	98	100	80	355	5	8	9	7	7¼†
	18	75	99	100	80	354	6	6	10	11	8¼†
	25	74	97	100	78	348	3	7	12	12	8½†
November	1	76	99	102	72	349	5	9	13	5	8†
	8	78	95	96	74	343	9	8	11	7	8¾†
	15	73	96	99	73	341	4	7	7	5	5¾†
	22	68	93	98	74	333	7	3	9	5	6†
	29	76	100	97	78	351	5	7	8	5	6¼†
December	6	71	99	96	80	346	7	7	9	6	7¼†
	13	78	97	102	74	351	7	7	11	6	7¾†
	20	79	100	97	74	350	9	10	8	5	8†
	27	83	98	92	74	347	6	9	7	5	6¾†
1833.											
January	- 3	85	98	105	78	366	4	7	6	4	5¼†
	10	84	97	94	72	347	10	10	12	7	9¾†
	17	83	99	94	76	352	5	6	5	5	5¼†
	24	80	102	95	75	352	5	7	8	5	6¼†
	31	78	95	91	71	335	6	5	6	4	7¾†
February	7	80	96	93	74	343	3	5	4	4	4†
	14	77	100	100	73	350	5	5	5	5	5†
	21	77	96	94	77	344	3	5	4	5	4¼
	28	78	93	95	80	346	2	3	6	5	4
March	- 7	80	89	96	87	352	4	6	1	4	3¾
	14	79	90	96	82	347	4	1	4	3	3
	21	80	95	106	83	364	4	3	5	4	4
	28	79	96	100	87	362	2	5	5	4	4
April	- 4	79	98	100	87	364	4	6	5	5	5
	11	76	98	96	90	360	6	6	7	5	6
	18	87	97	102	93	379	3	5	9	6	5¾
	25	76	97	96	94	364	4	3	5	4	4
Average for the whole year -							4¾	5½	6½	5½	5½

* Cholera raging. Five deaths for the mills during the first week; no deaths afterwards, the most active preventive measures being resorted to on its breaking out.

† Cholera subsiding or subsided; but succeeded by hysteria among the females; not fatal, but equally troublesome as the pestilence: and the bowel complaints were long, severe, wasting, and repeated; breaking out on every change of weather to cold or wet, and also when a very sultry day occurred.

SPINNING-

It will appear by the foregoing table, that the hands were more numerous during the severer periods of the sickness. They were so. Strangers kept aloof during a few weeks at first; but, the mortality appearing to have ceased, they came forward again as usual.

SPINNING-ROOMS.—No. 2. Wet-spinning.—Wetting light, and work easy; few changes of hands necessary.

No. 3. Dry-spinning.—Smart work; few changes of hands.

No. 4. Dry-spinning.—Smarter work still; wages higher than No. 3.; few changes of hands.

No. 5. Wet-spinning.—Wetting heavy; smart work; wages higher than in No. 2. Delicate hands require to be removed occasionally.

N.B.—These spinning-rooms, from new additions to the machinery, require now more hands permanently than they did this time twelvemonth.

Grandholm Works, 20th May 1833.

A. C.

GRANDHOLM MILLS EDUCATIONAL CENSUS, taken cursorily, 26th March 1833, including only such Hands as were within the Works at the time.

	COUNTRY.					EDUCATION.				UNEDUCATED.				
	Lowlanders.	Highlanders.	Irish.	Sundries.	Total.	Readers only.	Readers and Writers.	Cannot read nor write.	Total.	Lowlanders.	Highlanders.	Irish.	Sundries.	Total.
Hackling -	134	30	2	8	174	38	117	19	174	17	2	—	—	19
Spinning -	557	48	23	—	628	349	77	202	628	147	32	23	—	202
Weaving -	168	34	66	1	269	116	69	84	269	25	12	47	—	84
Mechanics -	41	5	1	1	48	—	46	2	48	—	2	—	—	2
	900	117	92	10	1,119	503	309	307	1,119	189	48	70	—	307

Attending Evening-schools after mill-hours - - 104

20th May 1833.

A. C.

MEMORANDUM ON SUNDAY EVENING-SCHOOLS.

The Aberdeen Gratis Sabbath Evening-school Society have thirty-three schools in operation in this city and the surrounding country, attended by upwards of 2,000 children and young people. The sole object of the institution is the religious instruction of the young of both sexes, chiefly such as have few or no other means of improvement. The hours of attendance are usually from six to eight o'clock on Sabbath evening. A few of the schools have an advanced class, which meets for an hour after the others are dismissed. Nine of these schools are situated at such a distance from any manufacturing establishment as that they can be of no advantage whatever to the manufacturing population.

Only one of the society's schools can in any way be said to be connected with a manufacturing establishment. Messrs. Gordon, Barron, and Co., cotton-manufacturers, Woodside, have, for some years past, afforded a room, rent-free, as well as fire and light, for a school among their workpeople.

None of the other schools have any assistance from either of the manufacturing establishments.

For many years a Sabbath-evening and also a week-day school were supported by one of the large manufactories, but both were discontinued some years ago.

About eight or nine years ago an effort was made by the Society to establish a Sabbath-school, either on the premises of, or immediately contiguous to, each of the manufacturing works; but the measure did not receive the countenance of the proprietors, and was consequently unavailing.

There are twenty-four of the Society's schools where boys and girls employed at manufacturing works may have an opportunity of attending. The number of scholars in these twenty-four schools is about 1,600, but not more than from 230 to 250 of these are employed in factories.

A very large number of the poorest children, who suffer most from labouring in these establishments, are not able, from want of clothes, debility, and fatigue, to attend Sabbath-schools.

(A. 2.)

M

Northern District.

No. 15.

schools. To see the pitiable state of these children, in all their poverty, wretchedness, and misery, one must repair to the dark and dirty recesses of the more obscure dwellings of the poor, in back courts, cellars, and garrets. A large proportion of such persons never arrive at maturity. Many of them are removed by death at an early age; some of them suddenly, and others by lingering diseases. Those who are spared to maturity have too generally to contend with an enfeebled constitution and an uncultivated mind.

However willing the girls and children employed in factories, or their parents, might be to obtain instruction, and many of the latter are too indifferent and careless about this matter, they really have no time left for acquiring elementary education. Their strength and spirits are quite exhausted by the quantity of daily labour and confinement which they undergo. Hence many females, who have been at work in factories from a very early age, cannot read distinctly a single verse of the Bible when at thirty years of age, and have children of their own.

When it is almost universally acknowledged that ten hours labour in the open air, with an intermission of an hour each for breakfast and dinner, are as much as an able-bodied adult can regularly sustain, an equal amount of labour within doors, amidst confined and unwholesome air, must surely be still more exhausting. And if ten hours be the highest limit of labour that can be safely exacted from adults, the same quantity must be far too much to expect from children and girls under maturity. This will doubtless be readily confirmed by every impartial and experienced physician.

Several of our works here have much longer hours than the above, and allow only twenty minutes for breakfast and forty minutes for dinner, as we are informed.

We know families who would send their children to our schools to receive religious and moral instruction, but they affirm that they cannot, as they must, from necessity, allow their children a large portion of the Lord's Day for rest and sleep.

Aberdeen, 20th May 1833.

WM. THOMSON jun., Treasurer.
JAS. GRANT, Secretary.

B. 1.

Western District.

APPENDIX to the REPORTS of MESSRS. HORNER and WOOLRICHE.

No. 1.

B. 1.

1. STATISTICAL REPORT of the BIRMINGHAM GENERAL HOSPITAL, for the Year 1826.

Western District.

Diseases.	Number of Cases.	Number of Deaths.	Males.	Age of Males.	Females.	Age of Females.
				Years.		Years.
Pneumonia - -	9	2	3	18 to 24	6	17 to 25
Hæmop. & Phthisis -	58	15	42	16 to 23	16	18 to 48
Hepatitis A. & Ch. -	4	1	—	—	4	40 to 50
Rheumatismus -	100	—	79	18 to 58	21	26 to 43
Diarrhœa - -	5	3	4	29 to 36	1	46
Hydrops - -	8	3	5	32 to 51	3	45 to 56
Syphilis - -	19	2	12	15 to 29	7	18 to 38
All other Diseases -	1,200	—	—	—	—	—
Accidents - -	2,279	—	—	—	—	—

No. 1.

2. STATISTICAL REPORT of the BIRMINGHAM GENERAL HOSPITAL, for the Year 1827.

Diseases.	Number of Cases.	Number of Deaths.	Males.	Age of Males.	Females.	Age of Females.
				Years.		Years.
Febris. Con. - -	3	—	1	18	2	19 to 26
Pneumonia - -	4	1	3	18 to 23	—	—
Hæmop. & Phthisis -	81	23	64	15 to 46	17	18 to 27
Hepatitis A. & Ch. -	3	—	3	29 to 46	—	—
Rheumatismus -	131	—	101	30 to 62	30	19 to 49
Diarrhœa - -	8	4	5	16 to 46	3	51 to 63
Hydrops - -	9	3	4	40 to 46	5	45 to 61
Syphilis - -	21	—	14	19 to 39	7	17 to 28
All other Diseases -	1,419	—	—	—	—	—
Accidents - -	1,346	—	—	—	—	—

3. STATISTICAL REPORT of the BIRMINGHAM GENERAL HOSPITAL, for the Year 1828.

Diseases.	Number of Cases.	Number of Deaths.	Males.	Age of Males.	Females.	Age of Females.
				Years.		Years.
Pneumonia - -	6	2	4	19 to 23	2	20 to 36
Hæmop. & Phthisis -	96	17	81	20 to 56	15	13 to 39
Hepatitis A. & Ch. -	6	2	2	36 to 51	4	43 to 49
Rheumatismus -	110	—	91	15 to 71	19	26 to 52
Diarrhœa - -	9	3	1	14	8	30 to 36
Hydrops - -	11	3	7	29 to 62	4	41 to 49
Syphilis - -	19	—	13	15 to 24	6	19 to 33
All other Diseases -	1,548	—	—	—	—	—
Accidents - -	2,016	—	—	—	—	—

(B. 1.)

M 2

4. STATISTICAL REPORT of the BIRMINGHAM GENERAL HOSPITAL, for the Year 1829.

Western District.

No. 1.

Diseases.	Number of Cases.	Number of Deaths.	Males.	Age of Males.	Females.	Age of Females.
				Years.		Years.
Febris Con. - -	3	1	1	18	2	15 to 21
Hydrocephalus - -	2	—	2	1 to 2	—	—
Cynanche Trach. - -	2	—	2	16 to 19	—	—
Pneumonia - -	3	1	3	26 to 40	—	—
Hæmop. & Phthisis - -	91	15	87	16 to 46	4	21 to 24
Hepatitis A. & Ch. - -	8	3	2	30 to 45	6	38 to 60
Rheumatismus - -	101	—	81	16 to 71	20	18 to 40
Diarrhœa - -	10	3	6	12 to 38	4	19 to 65
Hydrops - -	11	4	1	26 to 66	3	40 to 53
Syphilis - -	26	2	21	19 to 28	5	15 to 23
All other Diseases - -	1,481	—	—	—	—	—
Accidents - -	2,244	—	—	—	—	—

5. STATISTICAL REPORT of the BIRMINGHAM GENERAL HOSPITAL, for the Year 1830.

Diseases.	Number of Cases.	Number of Deaths.	Males.	Age of Males.	Females.	Age of Females.
				Years.		Years.
Febris Con. - -	3	—	3	19 to 23	—	—
Cynanche Trach. - -	2	—	—	—	2	10 to 15
Pneumonia - -	3	1	2	18 to 33	1	21
Hæmop. & Phthisis - -	64	9	51	17 to 42	13	21 to 35
Hepatitis A. & Ch. - -	3	—	3	35 to 43	—	—
Rheumatismus - -	78	—	71	19 to 64	7	23 to 42
Diarrhœa - -	3	1	3	33 to 60	—	—
Hydrops - -	6	2	2	36 to 51	4	42 to 53
Syphilis - -	36	—	30	15 to 61	6	18 to 27
All other Diseases - -	1,377	—	—	—	—	—
Accidents - -	1,828	—	—	—	—	—

6. STATISTICAL REPORT of the BIRMINGHAM GENERAL HOSPITAL, for the Year 1831.

Diseases.	Number of Cases.	Number of Deaths.	Males.	Age of Males.	Females.	Age of Females.
				Years.		Years.
Febris Con. - -	4	2	2	18 to 36	2	23
Pneumonia - -	4	2	4	25 to 49	—	—
Hæmop. & Phthisis - -	76	19	68	16 to 56	8	18 to 28
Hepatitis A. & Ch. - -	6	2	3	40 to 56	3	38 to 60
Rheumatismus - -	92	—	77	17 to 55	15	19 to 53
Diarrhœa - -	5	2	3	40 to 50	2	27 to 33
Hydrops - -	8	1	2	40 to 48	6	39 to 52
Syphilis - -	17	—	13	17 to 29	4	15 to 24
All other Diseases - -	1,254	—	—	—	—	—
Accidents - -	2,002	—	—	—	—	—

7. STATISTICAL REPORT of the BIRMINGHAM GENERAL HOSPITAL, for the Year 1832.

Diseases.	Number of Cases.	Number of Deaths.	Males.	Age of Males.	Females.	Age of Females.
				Years.		Years.
Febris Con. - -	8	2	6	20 to 32	2	19 to 23
Cynanche Trach. - -	4	—	2	16 to 22	2	16 to 19
Pneumonia - -	2	1	2	30 to 40	—	—
Hæmop. & Phthisis - -	64	17	51	11 to 50	13	13 to 42
Hepatitis A. & Ch. - -	5	—	2	32 to 46	3	38 to 50
Rheumatismus Do. - -	76	—	60	16 to 62	16	24 to 48
Hydrops - -	16	12	12	16 to 46	4	30 to 60
Syphilis - -	36	—	26	16 to 72	10	17 to 36
All other Diseases - -	1,519	—	—	—	—	—
Accidents - -	2,317	—	—	—	—	—

No. 2.

Western District.

No. 2.

RETURN from Mr. BAYNHAM'S REGISTER, including CASES treated in the GENERAL DISPENSARY and TOWN INFIRMARY at BIRMINGHAM.

	1812.	1813.	1814.	1815.	1816.	1817.	1818.	1819.	1820.	1821.	1822.	1823.
Total - -	1,067	966	930	1,106	1,134	1,349	1,655	820	622	850	1,210	3,096
Males - -	349	303	307	350	425	528	606	302	275	377	519	1,369
Females - -	718	663	623	756	709	821	1,049	518	347	473	691	1,727
Children under } Seven - -	90	103	62	185	117	227	270	145	57	142	175	543
Febres - -	102	78	79	237	110	227	440	86	44	46	64	230
Catarrhus Epid.	—	—	—	—	—	—	—	—	—	—	—	56
Variola - -	9	9	6	6	4	34	19	18	2	5	10	54
Died - -	6	1	—	1	3	4	2	3	—	—	—	5
Rubeola - -	—	31	5	35	15	27	44	45	—	27	1	5
Scarlatina - -	10	9	1	20	19	23	4	—	7	29	15	17
Pertussis - -	7	8	1	10	8	6	32	—	—	—	11	5
Proportion of } Pulmonary Disorders	340	253	322	309	381	315	312	222	104	110	152	553
Diarrhœa - -	33	36	30	41	35	52	113	26	23	79	95	84
Epilepsia - -	8	4	3	8	8	13	12	10	7	12	2	17
Mania Amentia	3	5	7	5	6	4	7	—	1	1	2	27
(continued.)	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	TOTAL.		
Total - -	2,664	2,956	2,798	2,806	3,249	3,066	3,510	4,192	4,200	44,246		
Males - -	1,148	1,406	1,274	1,259	1,471	1,450	1,567	1,985	2,117	19,387		
Females - -	1,516	1,550	1,524	1,547	1,778	1,616	1,943	2,207	2,083	24,859		
Children under } Seven - -	553	469	532	480	631	507	627	878	753	7,546		
Febres - -	295	320	365	362	387	230	248	361	283	{ Exclusive of Exanthemata.		
Catarrhus Epid.	—	—	—	—	—	—	—	269	—			
Variola - -	18	22	40	21	17	21	46	155	25	541 { 67 Cases after Vaccination.		
Died - -	1	2	6	5	2	4	11	30	2	88 fatal Cases.		
Rubeola - -	85	6	32	47	67	11	66	57	52	658		
Scarlatina - -	—	1	6	45	52	59	46	61	77	501		
Pertussis - -	43	60	—	7	84	15	22	97	55	471		
Proportion of } Pulmonary Disorders	327	406	336	356	486	513	583	1,033	732	{ Epidemic Ca- tarrh inclusive.		
Diarrhœa - -	183	200	163	125	197	122	174	296	341	{ Comprising ordi- nary Cholera.		
Epilepsia - -	17	14	7	16	18	11	20	25	25	257		
Mania Amentia	12	16	11	22	17	27	31	20	30	254		

J. M. BAYNHAM, Surgeon.

Western District.

No. 3.

The NUMBER of OUT-PATIENTS attended at the BIRMINGHAM INFIRMARY, from the 1st of January 1831 to the 31st of December 1832.

Age.	MALES.						FEMALES.						Total of both Sexes.	Died.
	Employed in Factories.	Died.	Not employed in Factories.	Died.	Total of Males.	Died.	Employed in Factories.	Died.	Not employed in Factories.	Died.	Total of Females.	Died.		
Under 15	54	—	845	43	899	43	28	—	899	42	927	42	1,826	85
15 to 19	156	—	54	—	210	—	164	6	290	8	454	14	664	14
20 to 24	206	2	112	6	318	8	156	2	308	6	464	8	782	16
25 to 29	188	—	80	—	268	—	136	2	352	2	488	4	756	4
30 to 34	138	4	108	6	246	10	72	—	262	6	334	6	580	16
35 to 39	72	—	82	2	154	2	32	2	204	2	236	4	390	6
40 to 44	78	2	68	—	146	2	36	—	248	—	284	—	430	2
45 to 49	50	4	58	2	108	6	22	—	162	2	184	2	292	8
50 to 54	30	—	48	2	78	2	20	2	154	2	174	4	252	6
55 to 59	26	—	46	2	72	2	22	—	90	4	112	4	184	6
60 to 64	22	—	34	6	56	6	12	—	114	6	126	6	182	12
65 to 69	16	—	20	—	36	—	6	—	38	6	44	6	80	6
70 & upwards.	4	—	84	6	88	6	6	—	110	12	116	12	204	18
Total -	1,040	12	1,639	75	2,679	87	712	14	3,231	98	3,943	112	6,622	199

Employed in Factories	{	Males	1,040	Died. 12
		Females	712	14
		Total	1,752	26

Not employed in Factories	{	Males	1,639	Died. 75
		Females	3,231	98
		Total	4,870	173

G. PARSONS.

No. 4.

No. 4.

1. DISEASES treated at the WORCESTER DISPENSARY during the last Five Years, 1828 to 1832 inclusive.

Diseases.	Number of Cases.	Number of Deaths.	Males.	Age of Males.	Females.	Age of Females.	Observations.
Febris Con. - -	402	20	144	2 yrs. to 74 yrs.	258	2 yrs. to 76 yrs.	{ including Pleuritis.
Hydrocephalus - -	2	1	1	5 years.	1	7 months.	
Cynanche Trach. - -	—	—	—	—	—	—	
Pneumonia - -	153	10	56	7 mths. to 72 yrs.	97	9 mths. to 66 yrs.	
Hæmop. & Phthisis -	298	75	99	7 yrs. to 71 yrs.	199	9 yrs. to 57 yrs.	{ including Gonorrhœa. Chiefly Gloveresses.
Hepatitis A. & Ch. -	69	3	19	21 yrs. to 70 yrs.	50	10 yrs. to 68 yrs.	
Rhumatisimus Do. -	117	3	55	10 yrs. to 80 yrs.	62	9 yrs. to 76 yrs.	
Diarrhœa - -	55	3	17	2 mths. to 72 yrs.	38	4 mths. to 85 yrs.	
Syphilis - -	35	—	9	17 yrs. to 45 yrs.	26	17 yrs. to 53 yrs.	
Dyspepsia - -	367	—	52	15 yrs. to 70 yrs.	315	11 yrs. to 85 yrs.	
Bronchitis & Catarrh -	400	28	184	11 mths. to 76 yrs.	216	15 mths. to 80 yrs.	
All other Diseases -	1,160	53	322	All ages.	838	All ages.	
Accidents - -	46	1	25	3 yrs. to 70 yrs.	21	7 yrs. to 80 yrs.	
Total -	3,104	197	983	2 mths. to 80 yrs.	2,121	4 mths. to 94 yrs.	

ROBERT J. N. STREETEN, M.D.

2. TOTAL NUMBER of PATIENTS admitted into the WORCESTER DISPENSARY during the last Five Years, 1828 to 1832 inclusive.

Western District.

No. 4.

Age.	Total Number admitted.		Of these Died.		Observations.
	Males.	Females.	Males.	Females.	
Under 15	161	215	12	22	
15 and 19	71	171	5	9	
20 and 24	75	198	5	16	
25 and 29	93	205	7	15	
30 and 34	89	216	5	10	
35 and 39	66	170	3	5	
40 and 44	87	228	10	12	
45 and 49	80	141	8	7	
50 and 54	59	146	2	4	
55 and 59	48	85	5	3	
60 and 64	63	92	6	4	
65 and 69	28	63	3	2	
70 and above	46	89	11	5	
Age not known	6	20	—	2	
Total -	972	2,039	82	116	
Of whom employed in Factories	152	1,034	11	55	Glove Trade. China Works. Iron Foundry.
	27	10	1	1	
Not employed in Factories	28	—	2	—	
		995	68	60	

ROBERT J. N. STREETEN, M.D.

3. TOTAL NUMBER of PATIENTS admitted into the WORCESTER GENERAL HOSPITAL during the last Five Years.

Age.	Total Number admitted.		Of these Died.		Observations.
	Males.	Females.	Males.	Females.	
Under 15	298	230	14	16	The Account of Deaths is only accurate as far as In-patients goes, it being impossible to obtain an Account of the Deaths of Out-patients of whom we hardly ever get any Information.
15 and 19	311	354	16	8	
20 and 24	379	476	20	21	
25 and 29	323	392	10	3	
30 and 34	281	272	7	8	
35 and 39	272	169	4	6	
40 and 44	243	175	8	6	
45 and 49	218	168	6	2	
50 and 54	167	139	8	5	
55 and 59	117	68	12	2	
60 and 64	107	75	11	4	
65 and 69	92	32	3	1	
70 and above	78	42	8	2	
Total -	2,886	2,592	127	84	
Of whom employed in Factories	244	136	—	60	
Not employed in Factories	2,642	2,456	—	151	

H. COLE,
House Surgeon.

Western District.

4. CASES treated at the WORCESTER GENERAL INFIRMARY, from the 1st of May 1831 to the 1st of May 1833.

No. 4.

Diseases.	Number of Cases.	Number of Deaths.	Males.	Females.
Febris Con. - - -	39	4	20	19
Cynanche Trach. - - -	8	1	5	3
Pneumonia - - -	72	4	42	30
Hæmop. & Phthisis - - -	42	14	23	19
Hepatitis A. & Ch. - - -	59	3	32	27
Rheumatismus Do. - - -	111	2	71	40
Diarrhœa - - -	8	—	7	1
Hydrops - - -	17	7	9	8
Syphilis - - -	27	—	20	7
All other Diseases - - -	2,054	38	—	—
Accidents - - -	428	12	—	—
Total -	2,865	85	229	154

No. 5.

No. 5.

NUMBER of DEATHS in KING STANLEY, &c., from 1813 to 1833.

	Population in 1831.	Families in Agriculture.	Families in Manufactories.	All other Families.	Deaths from 1st Jan. 1813 to 1st Jan. 1833.	Deaths at 5 and under.	Deaths from 6 to 10.	Deaths from 11 to 15.	Deaths from 16 to 20.	Deaths from 21 to 30.	Deaths from 31 to 40.	Deaths from 41 to 50.	Deaths from 51 to 60.	Deaths from 61 to 70.	Deaths from 71 to 80.	Deaths from 81 to 90.	Deaths from 91 to 100.	Deaths from 101 to 102.
King Stanley -	2,483	72	317	125	745	250	34	25	40	56	38	43	43	82	76	52	5	1
Leonard Stanley	941	14	149	21	268	112	15	6	10	17	12	15	10	22	32	16	1	—
Stone House -	2,469	65	288	201	593	176	19	16	42	51	38	34	42	65	73	33	4	—
Rodborough -	2,141	29	292	115	588	172	33	28	20	48	46	41	43	65	71	28	3	—
Woodchester {	About 900	The different families have not been ascertained at Woodchester, but it is one of the most exclusively manufacturing parishes.			260	93	12	8	8	10	9	13	16	27	43	17	4	—

The above numbers of deaths are taken from the registers of the different parishes, in order to assist in forming a judgment of the state of mortality in the clothing districts in Gloucestershire, when compared with the general mortality of the kingdom. The parishes are all situated in the borough of Stroud, and may be fairly regarded as specimens of other clothing parishes. King Stanley, three miles and a half from Stroud, is taken as the central parish, and the others are all the adjoining parishes. Rodborough joins Stroud.

JER. SMITH, Curate of King Stanley.

No. 6.

No. 6.

LETTER from MESSRS. PARDOE, HOOMAN, & PARDOE to the FACTORY COMMISSIONERS.

To His Majesty's Commissioners for inquiring as to the employment of children in factories in the manufacturing districts of Great Britain.

Gentlemen,

In conformity to your wishes, that we should deliver to you our opinions in writing with respect to the Bill recently brought into the House of Commons by Lord Ashley, to regulate the labour of children and young persons in the mills and factories of the United Kingdom, we beg to state that we are decidedly of opinion that some legislative enactment for the protection of children employed as above is imperiously called for by every principle of justice and humanity and that such a measure would eventually be as much for the interest of the employers as for the employed.

Lord Ashley's Bill appears to be drawn with great care and wisdom: there are some few parts which, in our humble opinion, may be amended, and which, agreeably to your desire,

we will proceed to point out. In the first clause, night-hours are to be considered to commence at seven in the evening. We do not see the propriety of this, and would beg to suggest that eight o'clock be named instead of seven: this alteration would be attended with considerable convenience to many spinners, and need not at all interfere with the proposed limit of ten hours actual labour for young persons under eighteen years of age. Our proposition is, that the ten hours be between six in the morning and eight in the evening. We think clause three may be improved by fixing the time for the breakfast half hour at any time between the hours of eight and ten in the morning, so that it be open to arrangement between masters and their workpeople at what time between eight and ten in the morning the breakfast half hour should be. Clause twenty-four directs a time-book to be kept, which time-book is to be delivered to the clerk of the peace for the county every three months. Clause twenty-six directs that a certificate from the time-book be transmitted to the clerk of the peace, and clause twenty-seven imposes a heavy penalty for not delivering the same. All these are very proper, but we think they would be considerably improved by causing the chief constables, or some other such officers, to keep a registry of all mills and factories in their respective hundreds, and whose duty it should be to see that the owners of such mills and factories had deposited the time-books and certificates with the clerk of the peace as directed by the clauses above named, and in default of their having done so, to lay information against the offender, so that the penalties may be levied; and should the chief constables neglect their duty, they should be liable to a fine or punishment of some description. Clause thirty-one: the time should be stated before half past five in the morning, and eight instead of seven in the evening.

We have now named the alterations we would suggest in the minutiae of the Bill; the principle we fully agree with, excepting that we cannot help thinking that limiting the hours of labour for young persons under eighteen years of age to so short a time as ten hours will have a tendency to promote, in some degree, habits of idleness; and we think eleven hours might not be considered an unreasonable length of time, and would perhaps be more for the interest of all parties; still we are most decidedly in favour of limitation, and would willingly submit to ten hours rather than have none at all; and as respects night-work, should it be thought advisable to abolish it altogether, could such abolition be made effectual and general, we should have no objection to it, and do not believe our interests would be at all injured by it. The great desideratum will be, that the restrictions should be completely general on all mills and factories driven by power, and the Act so carefully and strongly drawn as to render it impossible to evade it.

With respect to the effects the proposed Bill, when in operation, would produce, we (as before observed) are of opinion that it would ultimately be beneficial to masters and workpeople. In the first instance it would most probably cause a reduction in wages; but the supply (from being limited) would scarcely keep pace with the demand, and would soon induce an extension of mills and factories, the necessary consequence of which would be an increased demand for labour, and, as a matter of course, better wages would be obtained. Now again, if it is necessary to work long hours to meet a demand for goods, under the Bill it will be necessary to employ two sets of hands; this will cause a more general diffusion of labour, which (although wages were somewhat lower than they now are) would be a benefit to the operative classes, particularly in families where two or three individuals were old enough to be employed. At present it is frequently the case that a portion of a population are employed excessive hours, whilst the others are starving from being unable to obtain any employment: under the Bill a much larger number would be employed, and although at a lower rate for the individuals themselves, still we imagine it would be productive of more general good. The limitation of the hours of labour would of course enhance the cost of production in some small degree, but not to such an extent as would cause us any alarm; the extra cost of the goods would, we feel confident, as far as respects consumption in this country, be of no consequence, and as regards our export trade we have no fears that that would be materially affected by the small advance which would be called for.

In conclusion, we beg to observe, that being warm advocates for the proposed measure, it has afforded us pleasure to answer the various questions you have put to us. The time has been so short that we could not afford you the whole of the information you were desirous of obtaining from us; but if what we have had in our power to give you tends to throw any fresh light on the important subject in agitation, we shall be much gratified.

We have the honour to remain, Gentlemen,

Kidderminster, 8th May 1833.

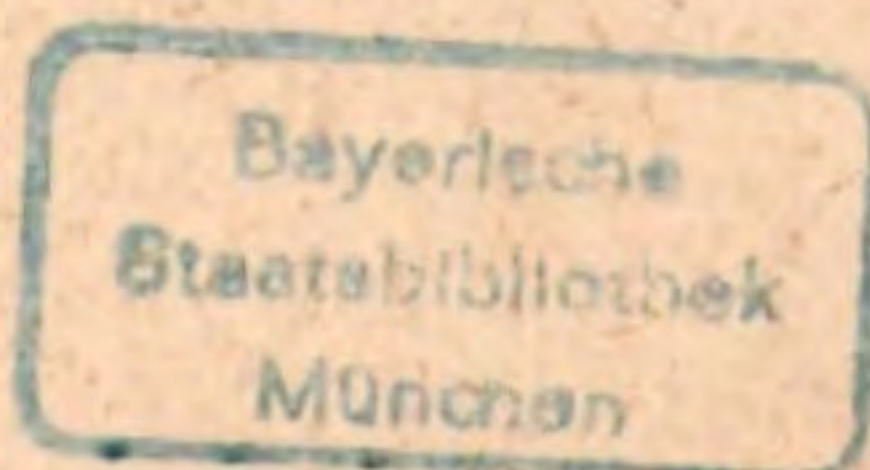
Your most obedient servants,
PARDOE, HOOMAN, & PARDOE.

No. 7.

No. 7.

OBSERVATIONS on the objectionable CLAUSES of the FACTORY BILL.

Clause 1 provides that persons under twenty-one shall not work between seven at night and five in the morning.—*Objection.*—Water being the chief source of the moving-power, and occasionally very irregularly supplied, great evil would result from a prohibition against working at all hours, even at night, when it might be necessary to make up the time lost by the want of a supply in the day-time. By conceding this the hours of labour need not be increased; they would be only changed from day to night. It sometimes happens that the
(B. 1.) N mills



Western District

No. 7.

mills situated upon the lower parts of the streams are not supplied with water till two or three o'clock in the afternoon, and when this is the case they could not work more than five or six hours a day, even according to Clause 8. If the legislature sees it right to limit the hours of labour of persons under twenty-one years of age to ten hours, let them be permitted to apply that labour at any period within the twenty-four hours most convenient.

Clause 2.—The exemption in favour of fulling should be extended to "roughing or raising the pile." This is a process of long duration, conducted by expensive machinery, and requiring great power and supply of water, so that any impediment to carrying it on would materially interfere with the regular conduct of the whole operations of the factory, and render the time of employment of the operatives fluctuating and uncertain.

Clause 3.—The present custom is for the operatives to have their refreshment at periods mutually agreeable and convenient to masters and servants, and these hours are occasionally changed to suit the convenience of the work. It would therefore be injurious to impose legislative regulations.

Clause 5.—As the hours of labour are to be limited to ten hours, why not apply this clause to the summer as well as the winter months?

Clause 6.—See answer to Clause 3.

Clause 7.—See objection to Clause 1.

Clause 8.—By this clause children and young persons are permitted to labour for ten hours any time from five in the morning to eight in the evening, where the propelling power is water only, in case of interruption by floods or short water. This should not be limited to water-power alone, because accidents occasionally happen to steam-engines by breakage and getting out of order, repairable in a few hours; an opportunity should therefore be afforded in this case to make up lost time.

Clause 9.—The operations in the manufacture of cloth being dependent on each other, the prevention of making up subsequently for lost time, in case of an accident, in the department in which the accident occurred, would occasionally interrupt the labour of a great portion of the operatives, and deprive them of a considerable part of their usual earnings.

Clause 10.—No objection on the part of the employers, but very objectionable on the part of the poor parents.

Clause 11.—Who is to certify for illegitimate children whose legal guardian is the Lord Chancellor?

Clause 16.—The manufactories in country districts do not require to be whitewashed more than once in three or four years. The labour of the workpeople must be suspended during the progress of the operation, both to the inconvenience and loss of themselves and their masters, and would besides entail an unnecessary expence upon the latter.

Clause 17.—We see no objection to the regulations for constructing new factories, but we consider it a very oppressive measure of legislation to enact such laws as press severely on the vested interests of manufacturers whose mills are already built, and upon such a scale and at such expence as to secure a certain extent of production, calculating the hours of labour to be, what they have for centuries been, a matter of arrangement between the operatives and the employer. The restriction of the hours of labour must necessarily diminish production, and the cost price is enhanced by the fixed charges of these expensive establishments falling on a lessened quantity. If, for instance, a manufactory has cost 50,000*l.*, the interest of this capital, fire insurance, clerks, managers, wear and tear, and all other permanent charges, continue of the same amount, whether there is a full production or only a quarter or a half or any other proportion. The reduction in the workpeople's wages must be much greater than in proportion to the time, for as the expences above enumerated are equal to the wages, say six hours in wages and six hours for establishment, the latter will remain at six when the hours are ten, and there will remain only four for wages.

Clause 23.—We conceive it would be quite sufficient to have the regulations hung up in any one conspicuous part of the premises.

Clause 24.—The time-book we consider a very vexatious departure from the principles of English legislation, as compelling a man to bear witness against himself, and unnecessary, for should the hours of labour be limited by law, and penalties inflicted for the violation of it, the persons employed, and who would have the power of lodging information, would be a sufficient check to manufacturers, without subjecting them to the provisions of clauses 24, 25, 26, & 27.

Clause 28.—We have no such thing in this country as a speed clock.

Clause 29.—We should willingly have every precaution adopted for the prevention of accidents, and would suggest that inspectors should be appointed to visit occasionally the different factories, with power to direct any guards that may appear to them to be necessary; but to subject master manufacturers to be committed as felons by the warrant of a coroner on the verdict of his jury (generally selected from the dregs of the people), for an accident that none can deplore more than the masters themselves, is so monstrous a proposition that no person of common feeling, who could by any means get rid of his establishment, would think of remaining one hour longer a manufacturer subject to the operation of such an enactment.

Clause 30.—By this clause the master is to be convicted on the evidence of the plaintiff or party interested, and a child of nine years old, as to his culpable neglect. What a temptation to a person of poor and low circumstances to commit perjury! Besides, the magnitude of the compensation is sufficient to induce persons to put themselves in the way of meeting with an accident.

Clause 31.

Clause 31.—Here the master is obliged to prove a negative, for which purpose he must adduce before the magistrate two witnesses from every nook and corner of the factory in which children are employed. In large establishments it may be necessary to bring up before the justice fifty or sixty witnesses at once.

Clause 32.—The appeal by certiorari is no boon, as no evidence is received by the Court of King's Bench, who decide the law of the case upon the evidence taken before the justice of the peace.

Clause 35.—Arbitrary and oppressive. The penalty for the first offence 200*l.*; for the second offence, double, 400*l.*; for the third offence, treble, 600*l.*; total, 1,200*l.*; besides twelve months imprisonment.

Clause 41.—By this clause all the weavers cottages about the country being comprehended in the terms "mill" or "factory," they will be restricted to ten hours labour. Their own children from nine to twenty-one years of age are generally employed by them, and they cannot carry on their trade without the assistance of these children. This clause will drive most of them to the parish for help to support their families. The masters have no control over the weavers who work at their own cottages.

N. B.—We think some clause should be introduced to protect manufacturers from the penalties of infringement of this Act, unless such infringement be committed with their knowledge and consent, for a servant wishing to injure his master might in his absence drive on the works beyond the limited hours, and thereby subject him to the penalties.

COPY of a Letter from the Chairman of the Committee appointed by a general meeting of the Manufacturers of Gloucestershire to watch the progress of the Factory Bill through Parliament, to the Commissioners of the Factory Bill, inclosing the above observations.

Gentlemen,

I have the honour to acknowledge receipt of your letter of the 13th instant, requiring to be furnished with the opinion in writing of the Committee for watching the progress of the Factory Bill through Parliament, upon the several clauses of that Bill. I have now the pleasure of enclosing such observations as have occurred to them. The Committee must, however, enter their protest against any legislative interference at all between the master manufacturers and operatives of this district, as uncalled for by the condition of the working classes, children as well as adults, and tending to injure the kindly feeling subsisting between master and servant, founded upon regulations that work well in the exercise of their respective duties, and are the result of centuries of experience.

I have the honour to be, Gentlemen,

Your very obedient servant,

(Signed) D. MACLEAN.

17th May 1833.

B. 2.

Western District.

APPENDIX to the REPORTS of Mr. SPENCER.

No. 1.

WAGES, per Week, of the following Classes of Artizan Labour.

Carpenters, from 1823 to 1833, 21s.
 Bricklayers, 20s. with no variation up to the present time.
 Masons, 22s. with no variation to the present time, 1833.
 Plumbers, 15s. to 20s.; no variation up to the present period.
 Blacksmiths, 15s. to 20s.; no variation up to the present period.
 Tailors, 20s. to 24s.; no variation.
 Shoemakers have generally averaged from 9s. to 14s.; superior workmen from 20s. to 25s.
 The wages in this small provincial town having little or no variation.
 Hat-finishers, upon general sorts of hats, will average from 17s. to 24s.; superior hat-finishers, in fine goods, average from 22s. to 28s. from 1825 to 1833. The hat trade in this town has been long in a very depressed state; but is now tolerably good within these few weeks, but the workmen cannot obtain wages with long hours higher than the minimum prices given above.

Newcastle-under-Lyme,
 1st May 1833.

B.2.

Western District.

No. 1.

No. 2.

PRICES of PROVISIONS at NEWCASTLE-UNDER-LYME within the several Periods herein-under mentioned.

Flour,—From 1824 to 1832, both inclusive, the prices per bag of 16 stone have varied from 2*l.* 11*s.* to 1*l.* 14*s.*, the present price.
 Oatmeal,—In 1816 and 1818 was 2*l.* 16*s.* per load of 24 pecks; since 1827 it has varied from 2*l.* 6*s.* to 1*l.* 16*s.*, the present price.
 Potatoes,—Since 1812 the prices per bushel of 80 lbs. have varied from 3*s.* to 1*l.* 6*d.*, the present price.
 Barley,—From 8*s.* 6*d.* to 3*s.* 7*d.*; present price, 4*s.* 5*d.*
 Beef,—From 9*d.* to 6*d.* per lb.; present price, 5*d.* to 6*d.*
 Mutton,—From 9*d.* to 7*d.* per lb.; present price, 6*d.* to 7*d.*
 Bacon,—From 1*s.* to 6*d.* per lb.
 Cheese,—From 9*d.* to 5½*d.* per lb.
 Butter,—From 1*s.* 6*d.* to 1*s.* 1*d.* per lb. of 18 oz.; present price, 1*s.* 2*d.*
 Beer,—From 8*d.* to 6*d.* per quart; present price, 4*d.* to 6*d.*
 Soap,—From 1*s.* 2*d.* to 6*d.*, present price per lb.
 Candles,—From 1*s.* 1*d.* to 6*d.*, present price per lb.
 Brown Sugar,—From 1*s.* 1*d.* per lb. to 6*d.*, present price.
 Tea,—From 7*s.* per lb. to 4*s.* 8*d.*, the present price per lb.
 Salt,—From 4*s.* 6*d.* per stone of 14 lb. to 3*d.*, the present price.
 Coals,—From 10*s.* to 8*s.* 4*d.* per ton; present price, 7*s.* 6*d.*
 Hats,—From 2*s.* to 1*s.* 6*d.* each; present price, 1*s.* each.
 Shoes,—Women's, from 6*s.* to 4*s.* 3*d.* per pair; Men's, 8*s.* 6*d.* to 6*s.*; present prices at the lowest scale.
 Coarse Calico,—From 1*s.* 6*d.* per yard to 4½*d.*, the present price.
 Rent of Cottage or Lodging,—From 4*l.* 10*s.* to 5*l.* per annum.

No. 2.

No. 7.

EXTRACT from the Sixth Report of the NEWCASTLE-UNDER-LYME NATIONAL and SUNDAY SCHOOLS.

Western District.

No. 7.

There are now in the Girls' School :					In the Boys' School :				
Day scholars	-	-	-	160	Day scholars	-	-	-	224
Sunday scholars	-	-	-	94	Sunday scholars	-	-	-	131
				<u>254</u>					<u>355</u>
Total					Total				

In both schools, 611 scholars; being an increase of 85 since the last Annual Meeting.

There have been admitted this year into the school 129 girls and 114 boys; and since the commencement of the institution 1189 boys and girls.

The sum subscribed for the clothing fund amounts to, Boys' School, 15*l.* 16*s.* 11*d.*; Girls' School, 10*l.* 6*s.* 1*d.*; annual subscriptions to the same fund, 39*l.* 5*s.* 6*d.*; total 292*l.* 8*s.* 6*d.*

The sewing department has been considerably improved, owing to the unremitting attention which the Sub-committee have kindly bestowed.

No. 8.

No. 8.

SCHOOLS, NEWCASTLE.

	Female Teachers.				Male Teachers.				Girls.		Boys.	
Marsh	-	-	20	-	-	19	-	-	127	-	-	117
Ebenezer		-	17	-	-	46	-	-	166	-	-	188
Primitive	-	-	8	-	-	17	-	-	70	-	-	105
Wesleyan		-	15	-	-	32	-	-	160	-	-	150
Knutton	-	-	11	-	-	14	-	-	36	-	-	37
			71			128			559			597

The above is a statement of the number of children in the schools connected with the Sunday-school Union.

No. 9.

No. 9.

NUMBER of CHILDREN taught in the different CHARITY SCHOOLS established within the Precincts of the Borough of STOKE-UPON-TRENT, according to Returns made by the several Officers and others connected with those Institutions.

I. DAY SCHOOLS.

National Schools	-	-	-	-	-	-	935
Lancastrian British Schools			-		-	-	160
Infant Schools	-	-	-	-	-	-	358

Total - 1,453

II. SUNDAY SCHOOLS.

Church Schools	-	-	-	-	-	-	1,445
Old Methodist Schools	-	-	-	-	-	-	4,292
New Methodist Schools	-	-	-	-	-	-	3,258
Primitive Methodist Schools		-	-	-	-	-	719
Independent Schools	-	-	-	-	-	-	1,302
Catholic Schools	-	-	-	-	-	-	350
Baptist Schools	-	-	.	-	-	-	178

Total - 11,544

Total in Day Schools	-	-	-	-	1,453
— in Sunday Schools	-	-	-	-	11,544

Total - 12,997

N. B. Number taught in private schools not known.

Population of the Borough of Stoke, comprising Lane End, Lane Delph, Fenton, Stoke and Penkhull, Etruria, Hanley and Shelton, Cobridge, Burslem, Tunstall and Golden Hill, and Longport, according to the last census is about 57,000.

This inquiry was set on foot by me in the early part of the present year, when I had the honor to hold the situation of returning Officer for the Borough of Stoke. I felt anxious to ascertain the proportion which the number of children receiving instruction bore to the aggregate population. The above was the result.

Stoke upon Trent, 13th May 1833.

THOMAS MINTON.

No. 10.

Western District.

No. 10.

1. NUMBER of CHILDREN in SABBATH SCHOOLS within the Borough of STOKE-ON-TRENT.

	Church.	Methodists.			Independent	Catholic.	Baptist.	Total.
		Old.	New.	Primitive.				
Tunstall and Golden Hill	257	681	178	463	—	—	—	1,579
Longport	—	202	—	—	—	—	—	202
Burslem	288	1,614	378	66	110	—	80	2,536
Cobridge	—	125	211	—	—	250	—	586
Hanley and Shelton	192	395	990	110	1,022	—	98	2,807
Etruria	—	259	—	—	—	—	—	259
Stoke and Penkhull	338	290	213	80	—	—	—	921
Fenton	—	245	—	—	—	—	—	245
Lane Delph	—	—	460	—	—	—	—	460
Lane End	370	481	828	—	170	100	—	1,949
	1,445	4,292	3,258	719	1,302	350	178	11,544

2. NUMBER of CHILDREN in CHARITY DAY SCHOOLS.

	Bell.	Lancastrian.	Infant.	Total.
Burslem	201	—	110	311
Hanley and Shelton	284	160	180	624
Stoke	309	—	—	309
Lane End	141	—	68	209
	935	160	358	1,453

3. NUMBER of SABBATH SCHOOLS only, in which the fore-mentioned CHILDREN are taught.

	Church.	Methodists.			Independent.	Catholic.	Baptist.	Total.
		Old.	New.	Primitive.				
Tunstall and Golden Hill	1	2	1	1	—	—	—	5
Longport	—	1	—	—	—	—	—	1
Burslem	1	1	1	1	1	—	1	6
Cobridge	—	1	1	—	—	1	—	3
Hanley and Shelton	1	1	2	1	3	—	1	9
Etruria	—	1	—	—	—	—	—	1
Stoke and Penkhull	2	1	1	1	—	—	—	5
Fenton	—	1	—	—	—	—	—	1
Lane Delph	—	—	1	—	—	—	—	1
Lane End	1	2	2	—	1	1	—	7
	6	11	9	4	5	2	2	39

4. NUMBER of DAY SCHOOLS only, in which the fore-mentioned CHILDREN are taught.

	Bell.	Lancastrian.	Infant.	Total.
Burslem	1	—	1	2
Hanley and Shelton	1	1	2	4
Stoke	1	—	—	1
Lane End	1	—	1	2
	4	1	4	9

C. 2.

North-eastern District.

APPENDIX to MR. POWER'S REPORT.

No. 1.

MANUFACTURE of the Town and County of LEICESTER.

Question 1. State your belief as to the whole number of frames and looms employed in the town and county of Leicester, and whether that number be greater or less than when the return of 15,000 was made in the year 1817?—*Answer.* I believe the number of frames and looms in the town and county of Leicester to be now about 14,500; they have rather diminished since the return of 15,000 was made in 1817, and new ones have not been made to supply the places of the old worn-out frames.

P.S.—The average number of frames and looms always undergoing repair I estimate at 500, which deducted from the total number would leave 14,000 frames and looms in employ, or in a fit state for employment if wanted.

Question 2. State your belief as to the proportionate number of narrow frames, wide frames, and looms?—*Answer.* The number above stated as fit for employment, viz. 14,000, I believe to consist of 11,500 narrow frames, 2,000 wide frames, and 500 looms.

Question 3. State your belief as to the number of persons employed directly or indirectly by the above machines; showing how many by each class of machines, and the proportion under and above eighteen years of age?—*Answer.* The number of persons employed, directly and indirectly, in and by the whole of these machines, I believe to be about 28,000; viz. in the frames and looms 14,000, and out of the machines 14,000.

				Above 18 Years of age.	Under 18 years of age.
Total directly employed	In the narrow frames	-	11,500	7,500	4,000
	In the wide frames	-	2,000	2,000	—
	In the looms	-	500	500	—
	Total	-	14,000	10,000	4,000
Total indirectly employed	By the narrow frames	-	7,667	2,555	5,112
	By the wide frames	-	3,000	1,000	2,000
	By the looms	-	2,000	633	1,367
Employed in getting up the manufacture, and finishing it for sale after it has passed through the hands of the above persons			1,333	888	445
Total			14,000	5,076	8,924

Question 4. State your belief as to the average proportion of earnings cleared weekly by persons employed in each of the three classes of machines; viz narrow frames, wide frames, and
(C. 2.) O and

and looms?—*Answer.* I believe the clear weekly earnings of the persons employed in the three classes of machines to be

About 7s. weekly each in the 11,500 narrow frames, or £4,025 weekly :

N. B.—There are three holydays in the year ; viz. Easter, Whitsuntide, and Christmas, during which no work is produced ; a deficit of two weeks' work is caused thereby in the year's supply ; we therefore, when we say annually, must be understood to mean fifty weeks.

Annual average clear earnings of the 11,500 persons directly employed in the narrow frames		£	s.	d.
		201,250	0	0
About 12s. weekly each in the 2,000 wide frames, or £1,200 weekly :				
Annual average		60,000	0	0
About 20s. weekly each in the 500 looms, or £500 weekly :				
Annually		25,000	0	0
I believe the clear weekly earnings of the persons, i.e. adults and children, employed indirectly by the narrow frames, to be 2s. 6d. each for the 7,667 persons employed by the narrow frames, which is £958 7s. 6d. weekly :				
Annually		47,918	15	0
Ditto, for the 3,000 employed by the wide frames, 2s. 6d. each, or £375 weekly :				
Annually		18,750	0	0
Ditto, for the 2,000 employed by the looms, 3s. each, or £300 weekly :				
Annually		15,000	0	0
Ditto, for the 1,333 employed in finishing and preparing the manufacture for sale, 10s. each, or £666 10s. weekly :				
Annually		33,325	0	0
Total		401,243	15	0

Total average clear earnings of 15,076 adults, and 12,924 children under eighteen years of age, employed directly and indirectly in the hosiery trade of the town and county of Leicester, together 28,000 persons, £401,243 15s.

Question 5. State the proportion in value of the whole produce from each class of machines, and also the proportion of the produce of each which you believe to be exported annually?—*Answer.* As some machines are alternately employed upon different kinds of work, such as hose, half-hose, shirts, gloves, &c. I have, in order to give a more correct idea of the production and exportation from each class of machinery, estimated the whole of the said production and exportation in hose alone, as hose constitutes nearly the whole of the produce in the case of the looms.

	Produce in Dozens annually.	Average Value per Dozen.		Produce in Value annually.		
		s.	d.	£	s.	d.
From the 11,500 narrow frames I estimate the whole annual produce to be, calculated in hose	1,150,000	12	0	690,000	0	0
From the 2,000 wide frames, I estimate the whole annual produce to be, in hose	536,250	9	3	248,015	12	6
From the 500 looms, the whole produce in the various articles produced in them (gloves, hose, cravats, boots, &c.) I estimate at	£1,850 weekly.	-	-	92,500	0	0
Estimated total annual production in value of the hosiery and glove manufacture of the town and county of Leicester				1,030,515	12	6

The produce of the 11,500 narrow frames exported annually I estimate at about one twelfth, or 100,000 dozens out of the 1,150,000.—Average 12s.

Annual exportation in value from the narrow frames £ | s. | d. || | 60,000 | 0 | 0 |

The produce of the 2,000 wide frames exported annually I estimate at about two sevenths, or 150,000 dozens out of the 536,250 ; the average value of these is about 8s. 3d. a dozen, being about 15 per cent. below the value of the whole average produce.

Annual exportation in value from the wide frames £ | s. | d. || | 62,400 | 0 | 0 |

The produce of the 500 looms exported annually I estimate at about two fifths of the production in value, or £37,000 out of £92,500, the annual production

37,000 0 | 0 |

Total value annually exported £ | s. | d. || | 159,400 | 0 | 0 |

The result is that the portion exported in value is about two thirteenths of the whole annual production.

Question

Question 6, and last. State the specific kinds of work produced from each class of machines; assign the present average value to each description; and show the proportion of each kind exported, in dozens and value?—*Answer.* I believe the following to be a correct statement:—

KIND.		Number of Frames employed on them.	Annual Produce averaged in Hose.	Average Value per Dozen.	Home Consumption annually.	Proportion exported annually.	Annual Value of Export.	
			Dozens.	s. d.	Dozens.	Dozens.	£	s.
From the narrow frames.	Ribbed worsted hose -	1,000	100,000	14 0	95,000	1-20th or 5,000	3,500	0
	Children's socks, worsted, cotton, and woollen	1,000 frames, produce in socks 300,000 dozens, equal to	100,000 of hose at	14 0	90,000	1-10th or 10,000	7,000	0
	Brown, white, and co- loured cotton hose, and Angola hose - -	2,000	200,000	10 6	166,500	1-6th or 33,500	17,587	10
	Linen thread gloves, fine woollen gloves, and fancy articles - -	500	50,000	10 6	37,500	1-4th or 12,500	6,562	10
	Plain worsted & woollen hose - - -	7,000	700,000	13 0	661,000	1-17th or 39,000	25,350	0
Total -		11,500	1,150,000	- -	1,050,000	100,000	60,000	0
From the wide frames.	Ribbed worsted hose -	350	87,500	11 0	77,500	1-9th or 10,000	5,500	0
	Regular good boys' hose, shirts, drawers, &c. }	450	78,750	9 0	73,750	1-16th or 5,000	2,250	0
	Cut-up hose, low woollen gloves, and spider hose, all inferior goods - - }	800	320,000	8 0	187,000	2-5ths or 133,000	53,200	0
	Knotted hose - -	400	50,000	14 6	48,000	1-25th or 2,000	1,450	0
Total -		2,000	536,250	- -	386,250	150,000	62,400	0

KIND.		Number of Looms employed.	Annual Produce in Value.	Home Consumption annually in Value.	Proportion exported annually.	Annual Value of Exports.
From the looms.	Berlin gloves; imperial hose, worsted and cot- ton; cravats and fancy goods; and worsted and cotton Berlin webs in the piece - -	500	£ 92,500	£ 55,500	2-5ths	£ 37,000

	Persons.	Annual Value of Labour.	Annual Value of Material consumed.	Whole Annual Production.	Home Consumption annually.	Exported annually.
		£ s.	£ s. d.	£ s. d.	£ s. d.	£
Total in the ho- siery manufac- ture of Leicester & Leicestershire	28,000	401,243 15	629,271 17 6	1,030,515 12 6	871,115 12 6	159,400 or 2-13ths.

No. 2.

State of Families receiving Relief.	Income.	State of Families receiving Relief.	Income.
	£ s. d.		£ s. d.
18th April 1832.			
George Bradshaw's widow, aged 40	0 5 0	Mary Hanley, - - - aged 47	—
Mary - - - - 15	0 4 0	Judith - - - - 21	0 4 0
John - - - - 13	0 3 6	John - - - - 19	0 9 0
Henry - - - - 12	0 3 0	William - - - - 17	0 5 0
David - - - - 6	—	Charles - - - - 16	0 5 0
George - - - - 3	—	Rachael - - - - 14	} 0 4 9
From Town - - -	0 3 0	Esther - - - - 13	
Total - - -	0 18 6	Mary - - - - 8	—
		James - - - - 4	—
		Martha - - - - 1 $\frac{3}{4}$	—
		From Town - - -	0 4 6
		Total - - -	1 12 3
Benjamin Calvert, self, aged 36	0 7 0		
Ann, wife - - - 44	—	Jane Hodgson, - - - aged 25	—
William - - - - 16	0 4 6	Martha - - - - 6	—
Thomas - - - - 14	0 6 0	Maria - - - - 4	—
David - - - - 12	0 3 0	From Town - - -	0 3 0
John - - - - 9	—	Total - - -	0 3 0
Hannah - - - - 6	—		
Sarah Ann - - - 5	—	D. Hainsworth's wife, - aged 43	—
From Town - - -	0 2 6	Thomas - - - - 18	—
Total - - -	1 3 0	John - - - - 15	—
		Harriet - - - - 11	0 3 6
William Binns - - - aged 34	0 10 0	Casual - - - - -	0 4 0
Eliz., wife - - - 36	—	Total - - -	0 7 6
James - - - - 11	0 3 0		
William - - - - 9	—	Ann Ward, - - - - aged 40	0 1 0
Eliz. - - - - 6	—	Grace - - - - 8	—
Mary - - - - 1	—	Hannah - - - - 5	—
From Town - - -	0 4 0	Thomas - - - - 1 $\frac{1}{2}$	—
Total - - -	0 17 0	Mary Ann - - - 14	0 1 9
		William - - - - 13	0 5 0
Widow Ratcliffe, - - - aged 47	0 3 0	From Town - - -	0 4 6
Thomas - - - - 19	0 8 0	Total - - -	0 12 3
John - - - - 17	0 8 0		
Ann - - - - 13	0 4 0	George Calvert's Widow, aged 25	—
Mary - - - - 11	0 4 0	William - - - - 4	—
Rachael - - - - 6	—	Thomas - - - - 2 $\frac{1}{2}$	—
Samuel - - - - 4	—	From Town - - -	0 3 0
From Town - - -	0 3 0	Total - - -	0 3 0
Total - - -	1 10 0		
		Sinclare's Children	
Sarah Kendill, - - - aged 39	0 3 0	Simon - - - - aged 10	0 3 0
Sarah - - - - 13	0 5 0	Mary - - - - 7	—
William - - - - 11	0 3 6	Sarah - - - - 5	—
Joseph - - - - 8	—	From Town - - -	0 8 0
Thomas - - - - 6	—	Total - - -	0 11 0
Frederick - - - 3	—		
John - - - - 1	—	Widow Cross, - - - aged 47	—
From Town - - -	0 7 0	Martha - - - - 17	0 4 6
Total - - -	0 18 6	Mary - - - - 9	—
		John - - - - 8	—
Mary Bateman, - - - aged 51	0 1 0	From Town - - -	0 3 0
James - - - - 12	0 3 6	Total - - -	0 7 6
Jane - - - - 10	0 2 9		
William - - - - 8	—		
John - - - - 5	—		
From Town - - -	0 3 0		
Total - - -	0 10 3		

State of Families receiving Relief.	Income.	State of Families receiving Relief.	Income.
	£ s. d.		£ s. d.
James Alderson, - - - aged 42	0 7 0	Edward Stones, - - - aged 35	—
Sarah - - - - - 39	—	Rachel - - - - - 35	—
John - - - - - 15	—	Edward - - - - - 12	0 4 0
Moses - - - - - 11	0 2 9	Mary Ann - - - - - 10	—
Frederick - - - - - 9	—	James - - - - - 6	—
James - - - - - 7	—	John - - - - - 5	—
Eliza - - - - - 5	—	William - - - - - $\frac{8}{12}$	—
Mary - - - - - 3	—	Hannah - - - - - 3	—
William - - - - - $\frac{7}{12}$	—	From Town - - - - -	0 5 0
From Town - - - - -	0 7 0	Total - - - - -	0 9 0
Total - - - - -	0 16 9		
Hannah Hansworth, - - - aged 28	0 1 6	Benjamin Kirk, - - - aged 51	—
Henry - - - - - 7	—	Maria - - - - - 20	0 5 0
Mary - - - - - 5	—	Benjamin - - - - - 17	0 7 6
From Town - - - - -	0 3 0	From Town - - - - -	0 2 0
Total - - - - -	0 4 6	Total - - - - -	0 14 6
John Hustler, - - - aged 36	0 10 0	John Tyas, Shuttle-maker, aged 22	—
Mary - - - - - 33	—	Ann - - - - - 22	—
Thomas - - - - - 11	0 3 0	Thomas - - - - - 1	—
Jane - - - - - 8	—	From Town - - - - -	0 3 0
William - - - - - 6	—	Total - - - - -	0 3 0
Betty - - - - - 3	—		
Benjamin - - - - - $\frac{8}{12}$	—	Joseph Foster, Heckler, aged 24	—
From Town - - - - -	0 3 0	Sarah - - - - - 26	—
Total - - - - -	0 16 0	Mary Ann - - - - - 3	—
Thomas Thompson, - - - aged 30	—	John - - - - - 1	—
Jane - - - - - 30	—	From Town - - - - -	0 4 0
John Bateman - - - 6	—	Total - - - - -	0 4 0
Martha - - - - - 2	0 1 6		
Peter - - - - - $\frac{5}{12}$	—	Peter Stamford, Cloth Weaver, } aged 34 }	—
From Town - - - - -	0 3 4	Jane - - - - - 40	—
Total - - - - -	0 7 6	Sarah - - - - - 12	0 3 6
Maria Smith, - - - aged 23	—	Ann - - - - - 9	—
Child - - - - - 4	—	Jane - - - - - 5	—
From Town - - - - -	0 1 6	From Town - - - - -	0 3 0
Total - - - - -	0 1 6	Total - - - - -	0 6 6
James Barrass, - - - aged 40	—	Anthony Hall, Heckler, aged 48	—
Ann - - - - - 39	—	Hannah - - - - - 50	—
William Watson - - - 4 $\frac{1}{2}$	—	Judith - - - - - 16	0 4 6
Wallis - - - - - 2 $\frac{1}{2}$	—	Anthony - - - - - 14	0 4 0
Esther - - - - - $\frac{6}{12}$	—	Sarah - - - - - 12	0 1 6
From Town - - - - -	0 4 0	Charles - - - - - 7	—
Total - - - - -	0 4 0	From Town - - - - -	0 4 0
John Mann - - - - - 32	0 2 6	Total - - - - -	0 14 0
Mary - - - - - 27	0 1 0	Widow Foster, - - - aged 49	—
George - - - - - 10	—	Alice - - - - - 15	0 4 0
John - - - - - 8	—	Samuel - - - - - 13	0 2 9
Joseph - - - - - 6	—	Elizabeth - - - - - 7	—
From Town - - - - -	0 5 0	John - - - - - 6	—
Total - - - - -	0 8 6	From Town - - - - -	0 5 0
Samuel Simpson, - - - aged 33	0 1 0	Total - - - - -	0 11 9
Hannah - - - - - 31	—	Jeremiah Dunderdale, Cloth Weaver } aged 26 }	—
George - - - - - 9	—	Fanny - - - - - 24	—
Sarah Ann - - - - - 4	—	Jervas - - - - - 3	—
From Town - - - - -	0 4 0	Benjamin - - - - - $\frac{2}{12}$	—
Total - - - - -	0 5 0	From Town - - - - -	0 3 0
		Total - - - - -	0 3 0

State of Families receiving Relief.	Income.	State of Families receiving Relief.	Income.
	£ s. d.		£ s. d.
Widow Crossley, - - - - - aged 31	0 1 6	John Nichol's Widow - - - - -	—
Joseph - - - - - 8	—	Eliza - - - - - aged $1\frac{1}{2}$	—
Sarah - - - - - 5	—	Hannah - - - - - 1 $\frac{1}{2}$	—
From Town - - - - -	0 3 0	From Town - - - - -	0 3 0
Total - - - - -	0 4 6	Total - - - - -	0 3 0
Benjamin Atha's Widow, aged 38	0 5 0	Widow Bateman - - - - - aged 60	—
Benjamin - - - - - 8	—	John - - - - - 21	—
John - - - - - 5	—	Samuel - - - - - 17	0 7 0
Ann - - - - - 2	—	Joseph - - - - - 15	0 2 0
William - - - - - 15	0 7 0	Hannah - - - - - 11	0 2 3
From Town - - - - -	0 4 6	Jane - - - - - 9	—
Total - - - - -	0 16 6	From Town - - - - -	0 3 0
Joseph Stephenson, Clothier, aged } 38 }	—	Total - - - - -	0 14 3
Sarah - - - - - 39	0 0 6	James W. Denton, Slubber, aged 28	—
Hannah - - - - - 17	0 4 9	Hannah - - - - - 28	—
William - - - - - 15	0 4 9	James - - - - - 6	—
Benjamin - - - - - 12	0 3 9	George - - - - - 2	—
Mary - - - - - 10	0 3 0	From Town - - - - -	0 4 0
Isaac - - - - - 8	—	Total - - - - -	0 4 0
Sarah - - - - - 6	—	John Stead, Linen Weaver, aged 39	0 2 0
Martha - - - - - 4	—	Hannah - - - - - 39	—
Elizabeth - - - - - $1\frac{1}{2}$	—	Mary - - - - - 6	—
From Town - - - - -	0 4 0	Henry - - - - - 3	—
Total - - - - -	1 0 9	James - - - - - $\frac{1}{2}$	—
Joseph Marke, Mechanic, aged 32	—	From Town - - - - -	0 5 0
Susanna - - - - - 30	—	Total - - - - -	0 7 0
John - - - - - 5	—	James Blakey, Shoemaker, aged 47	0 1 0
Elizabeth - - - - - $\frac{7}{8}$	—	Elizabeth - - - - - 48	—
From Town - - - - -	0 4 0	David - - - - - 15	0 4 0
Total - - - - -	0 4 0	Ann - - - - - 13	0 2 6
Samuel Lax, Cloth Weaver, aged 36	0 16 0	John - - - - - 11	—
Charlotte - - - - - 34	—	James - - - - - 7	—
Sarah - - - - - 8	—	Edward - - - - - 5	—
Mary - - - - - 6	—	From Town - - - - -	0 4 0
Martha } Twins - - - - - 5	—	Total - - - - -	0 11 6
Joseph } - - - - - 3	—	Henry Greenwood's Widow, aged 32	—
David - - - - - $\frac{1}{2}$	—	Thomas - - - - - 10	—
William - - - - - $\frac{1}{2}$	—	Hannah - - - - - 9	—
From Town - - - - -	0 2 0	Sarah - - - - - 3	—
Total - - - - -	0 18 0	From Town - - - - -	0 4 6
John Hustler, - - - - - aged 64	—	Total - - - - -	0 4 6
Sarah - - - - - 46	0 1 0	Jos ^a Carr, Weaver - - - - - aged 32	0 1 3
John - - - - - 22	0 8 0	Mary, Wife - - - - - 26	—
Martha - - - - - 13	0 4 0	Jos. - - - - - 8	—
Elizabeth - - - - - 12	0 3 9	Ann - - - - - 2	—
George - - - - - 8	—	John - - - - - $\frac{1}{2}$	—
Mary Ann - - - - - 5	—	Total - - - - -	0 1 3
From Town - - - - -	0 3 0	John Roberts, Weaver - - - - - aged 30	—
Total - - - - -	0 19 9	Hannah, Wife - - - - - 29	—
William Robinson's Widow, aged 33	0 2 0	Louisa - - - - - 5	—
Mary - - - - - 12	0 2 6	Mary - - - - - 2	—
Maria - - - - - 6	—	Caroline - - - - - $\frac{1}{2}$	—
Olivia - - - - - 8	—	Total - - - - -	—
James - - - - - 4	—		
From Town - - - - -	0 6 0		
Total - - - - -	0 10 6		

State of Families receiving Relief.	Income.	State of Families receiving Relief.	Income.
	£ s. d.		£ s. d.
Betty Knott - - - aged 37	0 4 0	F. Buckley - - - aged 49	—
Sarah - - - - - 15	0 3 0	John - - - - - 20	—
Benjamin - - - - - 8	0 1 0	Mary, Housekeeper - 17	—
Martha - - - - - 6	—	Francis - - - - - 15	0 4 6
From Town - - - - -	0 2 0	James - - - - - 13	0 3 6
Total - - - - -	0 10 0	Elizabeth - - - - - 10	—
		Amelia - - - - - 5	—
		Ann - - - - - 3	—
		Total - - - - -	0 8 0
John Rhodes, Wellington Bridge, } aged 37 }	—	March 20, 1833.	
Elizabeth Rhodes - - - 39	—	Jonas Brooksbank - - -	—
Richard - - - - - 14	—	Mary Ann - - - - - aged 16	—
John - - - - - 9	—	Elizabeth - - - - - 14	0 3 0
Sarah - - - - - 8	—	John - - - - - 13	0 3 0
Alfred - - - - - 6	—	William - - - - - 10	—
Hannah - - - - - 4	—	Sarah - - - - - 6	—
Lavinia - - - - - 2	—	Ann - - - - - 3	—
Groves - - - - - 10 months	—	Total - - - - -	0 6 0
Total - - - - -	—		
		April 2, 1833.	
William Dobson - - - aged 37	—	Widow Marshall - - -	—
Martha, Wife - - - 37	—	Thomas - - - - - aged 14	0 3 0
John, not at home - - -	—	Ann - - - - - 10	0 2 0
William - - - - - 11	0 2 9	Frederic - - - - - 6	—
Thomas - - - - - 9	0 1 3	Job - - - - - 5	—
Jos. - - - - - 7	—	Charles - - - - - 3	—
Elizabeth - - - - - 4	—	Total - - - - -	0 5 0
Jane - - - - - 11	—		
Total - - - - -	0 4 0	May 15, 1833.	
		Widow Beeston - - -	—
Mary Jones - - - - - aged 55	—	Hannah - - - - - aged 14	0 4 9
Hannah - - - - - 22	0 6 0	James - - - - - 11	0 3 3
George - - - - - 16	0 6 0	Sarah - - - - - 8	—
Sarah - - - - - 14	0 4 6	William - - - - - 7	—
Total - - - - -	0 16 6	Mary - - - - - 3	—
		Samuel - - - - - 1	—
		Total - - - - -	0 8 0
Dec. 12, 1832.		May 15, 1833.	
George Atha - - - - - aged 56	—	Widow Barras - - -	0 4 6
Thomas - - - - - 25	—	Ann - - - - - aged 8	—
Jos. - - - - - 21	0 8 0	Jonathan - - - - - 6	—
Charles - - - - - 16	0 5 0	Mary - - - - - 3	—
George - - - - - 9	—	William - - - - - 1	—
Total - - - - -	0 13 0	Total - - - - -	0 4 6

No. 3.

TIME WORKED per Week at Messrs. MARSHALL'S Mills, Leeds, from 1806 to 1832.

Years.	January to April.	April to July.	July to October.	October to December.	Average.
	Hours. Min.	Hours. Min.	Hours. Min.	Hours. Min.	Hours. Min.
1806	72 6	72 12	70 51	70 36	71 24
1807	71 2	76 30	72 13	70 50	72 49
1808	71 32	72	72	60 28	69
1809	61 51	78 28	76 36	72 30	72 31
1810	72	72 12	71 53	78 1	73 31
1811	80 40	82 21	80 32	82 30	81 31
1812	70 45	71 21	70 55	64 38	69 25
1813	71 10	72 53	72 55	73 41	72 40
1814	79 46	81 28	81 37	82 56	81 27
1815	83 33	84 22	79 41	73 42	80 20
1816	69 50	69 41	64 37	58 42	65 42

Years.	January to April.	April to July.	July	October.	October to December.	Average.
	Hours Min.	Hours Min.	Hours Min.	Hours Min.	Hours Min.	Hours Min.
1817	68 42	72 30	72 33	71 33	71 19	
1818	71 8	74 40	70 12	69 3	71 16	
1819	70 39	64	51 45	64 17	62 40	
1820	66 14	77 1	77 32	74 22	73 47	
1821	75 16	76 8	72 27	72 14	74 1	
1822	72 34	72 23	69 52	73 6	71 59	
1823	70 58	73 57	68 20	76 22	72 24	
1824	70 59	73 17	72 45	71 54	72 14	
1825	71 41	73 39	71 59	72 6	72 21	
1826	67 1	62 35	64 25	67 2	65 16	
1827	71 13	69 18	72 40	70 8	70 50	
1828	71 45	71 49	71 7	71 56	71 39	
1829	71 59	72 49	71 50	70 54	71 53	
1830	72 6	73 11	72 45	71 38	72 25	
1831	68 54	70 33	69 21	68 58	69 27	
1832	65 22	66 25	66 47	64 5	65 40	

Average of 27 years, 71 hours, 50 minutes.

It is stated in evidence against us, that our standard time of work was from six to seven, or seventy-two hours per week, but that when we were throng we worked from five to eight or five to nine; and this is stated as a well-known and customary practice. Now it appears, from the above table, that since the peace in 1815, or for seventeen years past, we have never exceeded materially our average time of seventy-two hours per week. At two periods, near the termination of the war, 1811, and 1814 and 15, we worked about seven days per week, or from five to eight, but never in any single week from five to nine; and, previous to 1811, the time was as regular as since, so that the deviation, far from being customary, was confined to a period of extraordinary political and commercial fluctuation, and to two cases in the course of the twenty-seven years.

Since 1st June 1832, Mr. Price, a medical man, has been employed to inspect the condition, as to health, of all the persons in our works, attending twice a week to examine and prescribe for any of the workpeople, who either apply to him voluntarily, or are sent by the overlookers, or observed by himself in going through the works. Each week he goes through a fourth part of the mill to examine the hands when at work. During the year 1832 no charge was made to the workpeople, either for advice or medicines; they are now required to pay for the medicines they receive, if able to do so, Mr. Price being remunerated for his time by us. The workpeople are perfectly at liberty to apply for advice and medicines elsewhere, if they wish it. The firm subscribes to the Leeds Infirmary and Dispensary; and, during the twelve months from 1st February 1832 to 1st February 1833, we recommended to the Infirmary twenty-nine persons from our works, and to the Dispensary six. The total number of cases of persons attacked by malignant cholera in our employment was twenty, and, out of these, seven deaths. This is in the proportion of one in sixty-seven attacked, and one in one hundred and ninety dead, on the whole number employed.

MEDICAL REPORT.

Fevers.	Rheumatism.	Inflammation.	Ophthalmia.	Diarrhoea.	Coughs and Colds.	Slight Surgical Cases.	Swelled Legs.	Ulcers.	Dyspepsia.	Scrofula and disposition to Phthisis.	Other Complaints.	Total.
36	4	15	17	18	19	15	4	2	4	6	53	193

GENERAL REMARKS.

This table includes the applications for medical relief from 1st June 1832 to 1st April 1833, a period of ten months. The summer and autumn of 1832 were sickly, and the prevalence of cholera created great alarm and anxiety. Messrs. Marshalls humanely ordered medical aid to any of their hands if indisposed; and to this and the epidemic may be attributed the great number of cases included in the above report. Of the fever cases, the most severe (two or three in number) were sent to the House of Recovery; the remainder were attended at their own houses, if necessary, the rule being to attend the worst cases, of whatever kind, at their own homes; and such as were able attended at the mill, and were prescribed for twice a week. Of the complaints in the other columns, some were certainly severe;

severe, but the majority were slight, requiring absence from work for a short time only, and some not at all. The more severe cases, when protracted, or likely to be tedious of cure, were recommended to the Infirmary or Dispensary; others, if debilitated, were sent into the country, or advised to leave off work for a while. The column for other complaints includes generally such as were trifling cases, as head-ache, constipation, sore-throat, suppressed menses, &c. &c. In the monthly inspections of the hands, such as were considered failing, weakly, or otherwise unfit for work, were discharged, or placed at different or diminished labour. The discharged amount to about twelve in number, most of whom are included in the table.

It should be remarked, in conclusion, that we had no death; and the number of serious cases was very limited.

21st April 1833.

W. PRICE, Surgeon.

SCHOOLS, &c.

In 1823 a school-house was erected by Mr. Marshall, on part of the premises attached to the manufactory, and for about a year after the commencement the current expences were defrayed by a subscription, to which Mr. Eddison, Messrs. Fenton and Co., and others contributed, and also took a share in the management of the school. Since 1824 the school has been entirely under our own management, and the subscription was then relinquished. The charge for tuition is 2*d.* reading, 4*d.* writing, 6*d.* accounts, per week, which the master and mistress collect, and pay weekly into the office. The master's salary is 80*l.* per annum; the mistress 37*l.* The income of the school has never covered the current expences, exclusive of rent.

The school-house has been used for a day-school and Sunday-school for boys and girls, open to all the children of the neighbourhood, and for an evening-school, confined to children working in our manufactory during the day. The Sunday-school is gratuitous, and taught by voluntary teachers. The evening-school is gratuitous, and taught by the master of the day-school: it was opened in 1825. For four months in the year the children attend four nights a week an hour and a half each, and for eight months two nights two hours each night. In all cases the school commences immediately after the mill closes.

	Number in the Schools at present.			Left since the Commencement.		Total Number educated.	
	Boys.	Girls.	Total.	Boys.	Girls.	Boys.	Girls.
Day School -	196	90	286	331*	204	527	294
Sunday School -	167	168	335	606	618	773	786
Evening School -	80	—	80	183	—	263	—
Infant School -	60	40	100	—	—	60	40

The above table shows the number of scholars in each school; as many of the day scholars, however, attend the Sunday-school, the number of children having received education may be taken, without risk of excess, by adding only the excess of the Sunday scholars to the other three schools, when it appears that there are 464 boys and girls now receiving daily or weekly instruction, and that 1,922, including the present scholars, have been educated in the schools since the commencement in 1824. The infant school was built by Mr. Marshall on a part of the premises in 1832, and opened in November of that year.

There is a small library of books, suitable for children, attached to the day-school, established in 1827; it now consists of 140 volumes, 100 of which are given out to the children in rotation every week for perusal; no extra charge is made for the use of the books. We think this one of the most useful parts of the establishment, in giving an early taste for reading and acquiring useful knowledge, without which mere school education is very imperfect.

BOOK SOCIETY.

In 1824 we established a Book Society or small circulating library for the use of the workpeople and inhabitants of Holbeck, consisting of members having a share in the books, which are the property of the society, for which they pay 10*s.* on admission, and 1*s.* quarterly subscription, and of subscribers paying only the 1*s.* quarterly subscription. The library occupies a room in a house belonging to Mr. Marshall, of which the occupier is librarian; the society pay the rent of the house, £5. 5*s.* per annum, the librarian having no other emolument. The present members are 30; subscribers, 82; books in the library, 361; number circulated in 1832, 3,226.

* Of these 129 have come to work at the mill.

No. 4.

TOWNSHIP OF HUNSLET.

State of Families receiving Relief.	Income.	State of Families receiving Relief.	Income.
	£ s. d.		£ s. d.
Widow Brashaw - aged 38	—	Widow Joy - - - aged 35	0 2 0
Mary - - - - 14	0 4 0	Kizeah - - - - 10	—
John - - - - 12	0 3 6	Mary - - - - 8	—
Henry - - - - 10	0 2 6	Robert - - - - 5	—
David - - - - 5	—	James - - - - 2	—
George - - - - 1	—	Total - - - -	0 2 0
Total - - - -	0 10 6		
William Fearnside - - - -	0 15 0	Hudson - - - -	—
Wife, very lame - - - -	—	Girl - - - - aged 15	0 6 0
Ann - - - - aged 17	0 6 0	Boy - - - - - 13	Lame.
Mary - - - - - 14	0 3 0	Boy - - - - - 10	0 3 0
Benjamin - - - - 12	0 3 0	Boy - - - - - 8	—
William - - - - - 8	0 2 6	Girl - - - - - 5	—
Jos. - - - - - 5	—	Total - - - -	0 9 0
Thomas - - - - - 3	—		
John - - - - - 2	—	Widow Bateman - - - - aged 45	—
Sarah - - - - 3 months	—	Boy - - - - - 10	0 2 6
Total - - - -	1 9 6	Girl - - - - - 7	—
		Boy - - - - - 5	—
		Boy - - - - - 3	—
		Total - - - -	0 2 6
Joseph Dodgson - - - -	—	October 21, 1829.	
Wife - - - - -	—	Daniel Bateman - - - - aged 48	0 18 0
Elizabeth - - - - aged 16	0 4 6	Elizabeth - - - - - 18	House.
John - - - - - 14	0 5 0	Sarah - - - - - 16	0 6 0
Ann - - - - - 12	0 3 0	William - - - - - 14	{ With his
William - - - - - 10	0 2 6	Thomas - - - - - 12	father.
Eliza - - - - - 5	—	Abraham - - - - - 10	0 3 0
Jos. - - - - - 4	—	Lydia - - - - - 8	—
Total - - - -	0 15 0	George - - - - - 6	—
		Daniel - - - - - 4	—
		Ann - - - - - 2	—
		Total - - - -	1 10 0
John Heaton - - - - -	0 7 0		
Wife - - - - -	—	William Robinson - - - - aged 31	—
Hannah - - - - aged 14	0 4 0	Jos. - - - - - 12	0 3 0
Abraham - - - - - 11	—	Mary - - - - - 10	0 2 6
Mary - - - - - 9	—	Ann - - - - - 8	—
Nathaniel - - - - - 7	—	Olivia - - - - - 6	—
Martha - - - - - 2	—	Maria - - - - - 4	—
Total - - - -	0 11 0	James - - - - - 2	—
		Total - - - -	0 5 6
John Chester - - - - -	0 12 0		
Wife - - - - -	—	H. Meadley - - - - -	—
Thomas - - - - aged 21	0 10 0	Wife - - - - -	—
John - - - - - 20	0 7 0	Henry - - - - aged 8	—
Mary - - - - - 18	0 5 0	Francis - - - - - 6	—
Jonas - - - - - 11	0 2 0	Mary - - - - - 1	—
Ellen - - - - - 8	0 2 0	Total - - - -	—
Jane - - - - - 6	—		
Jos. - - - - - 4	—	John Ustler - - - - -	—
Eliza - - - - - 2	—	Wife - - - - -	—
Total - - - -	1 18 0	John - - - - aged 19	0 9 0
		Sarah - - - - - 15	—
Widow Hainsworth - - - -	—	Martha - - - - - 12	0 3 3
Thomas - - - - aged 18	No work.	Eliz. - - - - - 10	0 3 3
John - - - - - 16	—	George - - - - - 6	—
Harriott - - - - - 11	0 3 6	Mary - - - - - 4	—
Total - - - -	0 3 6	Total - - - -	0 15 6

State of Families receiving Relief.	Income.	State of Families receiving Relief.	Income.
	£ s. d.		£ s. d.
James Ratcliffe - - -	—	Sarah Kendle - - -	—
Wife - - -	—	Sarah - - - aged 12	0 4 0
Thomas - - - aged 17	—	William - - - 10	0 2 6
Charles - - - 8	0 2 6	Jos. - - - 7	—
John - - - 5	—	Thomas - - - 4	—
Jos. - - - 3	—	Frederick - - - 2	—
Martha - - - 2	—	John - - - 3 weeks	—
Ann - - - 11	0 3 0	Total - - -	0 6 6
Total - - -	0 5 6		
James Stevenson - - - aged 44	—	Widow Jackson's Family.	
Wife - - - 44	—	John - - - aged 15	0 5 0
William - - - 15	0 4 6	Joseph - - - 12	0 3 0
Thomas - - - 14	0 3 6	George - - - 10	0 3 0
James - - - 7	—	Ann - - - 7	—
Mary - - - 1 $\frac{1}{2}$	—	Sarah - - - 5	—
Total - - -	0 8 0	Total - - -	0 11 0
James Alderson - - - aged 40	—	Widow Bulmer; lives at Holbeck.	
Wife - - - 37	—	Children work at Mr. Marshall's	
John - - - 13	0 4 0	flax-mill.	
Moses - - - 9	—	Isaac (only half work) aged 20	0 4 6
Frederick - - - 7	—	John - - - 16	0 8 0
James - - - 5	—	Joseph - - - 14	0 3 9
Eliz. - - - 3	—	Ann - - - 11	0 3 0
Mary - - - 1	—	James - - - 9	—
Total - - -	0 4 0	George - - - 5	—
Eliz. Ratcliffe - - -	—	Total - - -	0 19 3
Thomas - - - aged 17	0 10 0	Widow Robinson; lives at Beeston.	
John - - - 15	0 6 0	Children work at Mr. Marshall's	
Ann - - - 11	0 3 0	mill.	
Mary - - - 9	—	Ann - - - aged 31	0 5 0
Rachel - - - 5	—	William - - - 19	0 8 0
Samuel - - - 2	—	Sarah - - - 16	0 5 0
Total - - -	0 19 0	Mary - - - 12	0 3 0
James Foster - - -	—	Frances - - - 9	—
Wife - - -	—	Martha - - - 5	—
William - - - aged 14	—	Total - - -	1 1 0
Eliza - - - 11	—	Widow Woodhead; lives at Hunslet.	
James - - - 8	—	Children at Mr. Marshall's mill.	
Edward - - - 5	—	Esther - - - aged 16	0 4 6
John - - - 3	—	Ann - - - 9	—
Total - - -	—	Sarah - - - 7	—
		Total - - -	0 4 6

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EXPLANATORY PREFACE

TO THE

TABLES RELATIVE TO COTTON AND SILK MILLS IN THE
LANCASHIRE DISTRICT.

By JOHN W. COWELL, Esq.

AMONG other Results exhibited in the following Tables, it is shown that the operatives, strictly so called, engaged in cotton-spinning and weaving by power, taken of all ages, from the greatest, whatever that may be, down to six and seven years, realize a rate of net earnings amounting within a fraction to 10s. 6d. per individual for sixty-nine hours work. The Table, which contains a Calculation of the whole number of operatives employed in cotton-working *by power* in England alone (exclusive of Scotland and Ireland), shows that they amount to 212,800; that their annual earnings at the above-mentioned rate reach a sum total of £5,777,434, being at the rate of £27. 2s. for each; and that no fewer than 86,623 of the whole number are under the age of eighteen.

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Tables of cotton-mills.

It has been, and it will continue to be, pertinaciously denied that the rate of net earnings in cotton-working *by power* is thus high; and both on this account, and because it is so often, and justly, objected to Statistical documents that no criterion is afforded for judging of the various degrees in which they are entitled to confidence, I think it will not be misplaced to premise such particulars as may enable every one to judge for himself concerning the character belonging to the Tables now submitted.

They are compiled from Returns made by various cotton-mill owners in Lancashire, Derbyshire, and Cheshire, to a Circular Form of Inquiry issued by the Factory Commissioners who investigated that district, and the character of them depends on the nature of the Form itself, and of the Returns made to it.

Copies of the Forms of Inquiry which were employed are subjoined, and I shall advert to some of the queries which they contain hereafter. They are appended *in blank*, and likewise as containing the replies and details furnished by the respondent, and in this latter shape they constitute the Returns themselves. The objects of these Forms to which I shall at present advert were, principally, the following:

First, To ascertain the net earnings of three classes of operatives, as respects age, viz. adults, adolescents, and children, throughout all the various departments of spinning and weaving as conducted in factories.

Second, The proportions in which the three classes are employed in cotton working.

Third, The proportions in which males and females are employed.

Fourth, The extent to which children and adolescents are in the direct employ respectively of the operative and the master.

Fifth, The time worked, and the quality of the work done, to gain a given amount of earnings.

When the Commissioners had been for a few days in the centre of the district which was assigned to them for investigation, they perceived the difficulties of framing a Form of Inquiry fitted to procure information of this kind in an accurate manner, and at the same time on a large scale.

While on the one hand it appeared necessary to descend into the minutest particulars in order to ensure accuracy, on the other it was to be feared, if the Form of Inquiry were constructed in a manner that would impose vexatious conditions on the mill-owner, if it were such as would cause a considerable loss of time in the working of the mill (which is equivalent to loss of money), or as would render it in other respects inconvenient for him to prepare a Return, either that but few Returns would be made to the inquiry, or that the generality of those which might be made would be incomplete or inaccurate; for, as the

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Factory Commissioners, though authorized to make inquiries, were not empowered to compel replies, it was in fact optional with the mill-owners to make or withhold Returns.

It was consequently an object of paramount importance that the Instrument of Inquiry should be framed in such a shape as would not indispose the mill-owners towards making Returns to it, for on this point the prospect of obtaining them in sufficient numbers to afford a solid foundation for averages and calculations appeared very much to depend; and the merits of a Form of Inquiry are not merely proportionate to the degree in which it is fitted to elicit accurate information, but likewise, in a case where the information is to be given voluntarily, to the degree in which it will procure a considerable amount of it.

Whatever difficulties may attach to the construction of a Form fulfilling these conditions, the Commissioners in Lancashire were in the most favourable situation for avoiding and overcoming them, for they were in the centre of the field over which their inquiries were to extend, and surrounded by persons of every station, equally capable and willing to render them assistance. They were enabled to consult numbers of every class practically conversant with cotton and silk working in all its branches; to take the opinions and suggestions of masters, overlookers, and operatives; of professional accountants resident in Manchester; indeed, of all whom they thought competent to advise them in any respect. Nor did they finally decide upon the plan which they adopted till after they had been themselves engaged in their investigations at Manchester and the neighbourhood for nearly three weeks, when they had obtained some practical insight into the customs and peculiarities of cotton and silk mills, and were in a condition to discriminate between what was feasible and advisable, and the reverse.

Hence they were enabled to construct a Form of Inquiry, which, being adapted to the technical customs, language, and arrangements existing in cotton and silk factories, and to the system of book-keeping and registration obtaining in them, afforded every reasonable probability that the Returns would be both accurate and numerous.

And they further determined to ask for the information they required by instalments, and to issue the Form in two parts, to follow each other at considerable intervals, having reason to think that more difficulty would be found to exist in the way of obtaining replies to some of the queries which they intended proposing than to others. Thus they hoped that the Return to the first would constitute a pledge from the person making it that he would make a Return to the second likewise.

The Returns that have been received, amounting to about 300 from cotton factories, and 50 from silk factories, have been placed in the hands of Mr. Samuel Stanway, an eminent accountant in Manchester. This gentleman had previously lent his assistance in drawing up the Forms; and his professional acquaintance with the system of book-keeping and registration in use in cotton and silk works, by enabling him to test the accuracy of the Returns in various ways, peculiarly fitted him for the task of tabling them.

He has approved of one hundred and fifty-one Returns from cotton mills as being both accurate and complete, and of seventy more as being accurate, as far as the replies extend, without being complete in all particulars, and of Returns from four night-mills. The Tables, as now submitted, have been compiled from these Returns, and the remaining Returns have not been employed in their construction.

The task of calculating these Tables has occupied Mr. Stanway continually for six months; he has made every calculation himself, and has checked and compared it with the original documents after it was executed; his signature to the Tables conveys his attestation on oath to the fidelity with which he has made the compilation, and to the accuracy of it. I am responsible for the principles on which the Forms of Inquiry were constructed, — and solely answerable for the construction of the Tables, as far as the arrangement and classification of the Results is concerned, — and for sanctioning the principles on which Mr. Stanway's calculations have been made and his averages deduced. This task, however, I should have been incapable of performing had I met with a less able and zealous assistant than that gentleman, whose suggestions, in fact, have mainly guided me throughout. He is fully entitled to the larger part of whatever merit the Tables may be found to possess.

The precautions taken in constructing the Forms of

It remains to point out some of the precautions that were taken, in the original composition of the Forms of Inquiry, in order to ensure accuracy and precision in the answers of

the mill-owners. As they were drawn up in technical language, they were perfectly intelligible to the persons to whom they were addressed, and, as they bore reference to the customs and arrangements prevailing in the business, and applied to the principles of accounting and registration obtaining in it, where the answers were made at all it was in point of fact more easy to give them accurately than the reverse. Other sources of inaccuracy than such as were merely clerical were stopped.

In the set of Forms appended it will be observed that the questions which they propose relate to one and the same period of time. Every mill-owner is requested to make his reply with reference to the month ending 4th May 1833, consequently the Tables extracted from the Returns exhibit the state of things relative to 225 cotton mills as it was in that month.

The substance of the questions proposed to the mill-owners by the two forms taken in conjunction is as follows:—

What quality of work were you engaged in spinning during the month ending 4th May 1833; what was the total number of hours which your mill worked during that month; and what was the total amount of net earnings paid by you to the total number of each denomination of operatives for that number of hours' work, classing them as adults, adolescents, and children, and according to their sexes?

The following is an example of what the answer contains in substance (I select No. 54, because that is the number of the mill the returns of which are appended):—

The Owners of Mill 54 answer:—"During the month ending 4th May 1833 our mill was engaged in spinning the quality of cotton indicated by the No. 42, and the total number of hours that it worked was 276; we employ 319 operative hands; viz. 8 machine-makers, 2 roller-coverers, 68 card-room hands, 105 spinning-room hands, 16 spinners, 44 reelers, 76 weavers; and the total sum paid among them as net earnings amounted to £636. 17s. 6d. for that number of hours' work, being at the rate of 119.78 pence per head all round for sixty-nine hours' work."

The Form is so constructed that the Return classes the whole number of operatives into adults, adolescents, and children of both sexes, exhibits the amount of net earnings of each denomination, and shows in what proportions the adolescents and children are in the immediate employ of the adult operative and of the mill owner, and the proportion which children and adolescents in each department bear to adults. This is a point of much importance, as will be shown hereafter.

The whole of the Returns from the First List of 151 mills are of this character, and the results extracted from them exhibit the net earnings of 48,645 operatives of all ages and both sexes, as being at the rate of 125.13 pence (or nearly 10s. 6d.) for sixty-nine hours' work.

• The features which peculiarly distinguish the Lancashire Forms of inquiry from the generality of statistical inquiries are, that they distinguish wages from net earnings, and that they do not seek to ascertain the latter by the day, week, month, or year, but *by the hour*; a method which is not only the most precise that can be imagined, but which the prevalent system of daily registering the number of hours and minutes during which the mill works, and other customs which obtain in cotton-making, rendered of easy adoption.

Features distinguishing the Forms of Inquiry employed.

They ascertain net earnings *by the hour*.

Had the question in the Lancashire Forms of Inquiry related either to "weekly wages" or "weekly net earnings," the reply would have been vague, and the Tables uncertain. Weekly wages are subject to various deductions for gas, for oil, for pay to assistants, for fines, for steam, &c. &c., and even in some cases for a portion of the rent of the mill itself. Some manufacturers in making their Returns would have made these deductions, others would not; some would have made certain deductions, and not others. It would have been impossible to distinguish between these cases, and no certainty could have attached to the averages and calculations deduced. Again, had the query related to "weekly net earnings," much vagueness would still have attached to the answers, for a week may comprehend forty, fifty, sixty, or one hundred hours' work; but as the query related to the *hours themselves*, the time employed in each mill to realize a certain amount of net earnings is accurately defined.

It will be observed, however, that the fifth Primary query of the first Form relates to "wages." This was advisedly adopted for the purposes of drawing the distinction between

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wages and net earnings, and for obtaining a check upon the particulars in the Schedules of details. In this respect it has been found of the greatest use; so likewise have all the primary queries of the first Form, which were merely framed to check the Schedules. The Tables themselves are compiled entirely from the details in the Schedules, and every discrepancy between them and the primary queries has in every instance been traced to its source. The particulars under the head of "total number employed," in the tenth column of the list, and throughout the supplements, are derived exclusively from the additions of the details in the Schedules.

By this method of estimating earnings by the hours' work a great difficulty in the way of obtaining an accurate return arising from holidays or temporary stoppages of the engine or wheel (technically called "break-downs" and "broken weeks") is avoided. This will be best understood by referring to a mill in which an accident of this kind appears to have occurred during the month ending 4th May 1833.

If we turn to No. 39. on the list of mills, it will be seen that it only worked 253 hours during the month ending May 4th; yet for that number of hours' work the answer of the owner bears that he paid the 419 operatives whom he employs the sum of £818. 4s. 10½d. as net earnings, which is at the rate of 127.82d. per head for sixty-nine hours' work. Such then is the rate of earnings in his mill, and it is equally so whether his mill had worked 250 or 300 hours during the month.

Hence, in the last column of the First List, the net earnings per head in each of the 151 mills have been calculated for the same number of hours, viz. sixty-nine; and thus, in comparing the average rate of the net earnings of an operative in any two mills, or of operatives of the same denomination in any two mills or districts, all misunderstanding, as far as time is concerned, has been rendered impossible. Every calculation in the Tables which belong to the First List where "time" is involved relates solely to sixty-nine hours, which number was adopted because it expresses what is called the regular number of hours for a week's work. It should be said, that in all instances where the persons employed in different rooms in any one mill worked different lengths of time, the average number of hours worked in the whole establishment has been used in the calculation, and the same remark applies to mills in which persons of different ages varied in the length of time they worked.

The preceding exposition of the circumstances under which the Inquiry was made, and of the means adopted for securing accuracy in the construction of the Tables, displays, I believe, all that is essentially requisite for enabling persons to satisfy themselves as to the degree of confidence with which they may accept, as being veracious expressions of facts, the results which the Tables exhibit. A few words are necessary on the classification and arrangements visible in them.

Relative to the classification and arrangement of the Tables.

The heads of the columns in List I. sufficiently explain the meaning of the information conveyed, except that regarding "Counts spun" and "Average Counts." This column indicates the quality of work done in the mill, and is explained in a note to the column. The information is extracted from the second Form. Though obviously connected with any question regarding wages or earnings, yet the full importance of it can only be properly appreciated by cotton workers. On this account it is necessary to state, that where parties making returns have not given the relative proportions of their counts they have been taken as equal. Had there been any difference it is however highly improbable that they would have omitted it, considering the way in which the "Account of Cotton spun" is registered in their counting-house books. Instances of such omissions however, as Mr. Stanway informs me, were very few.

The Supplements (A.) and (B.) furnish information as to the particular place and branch in which each individual comprised in the preceding Table is employed, and also on the very important subject of the numbers of each sex, adult and non-adult, employed in the manufacture; and Supplement (C.) carries the inquiry further by giving the relative proportions of children under fourteen years of age.

The numbers are also given of the non-adults in the direct employ of the master or operative.

The total number of hours worked by all the operatives included in these Tables, and by each of their classes, is also given; and hence the average net earnings of each individual are calculated with the greatest exactness.

There

There is, however, an exception to this in the case of the engineers, who it is evident must work rather longer than the other persons employed; however, as their wages will be in proportion to the number of hours which the mill works, this mode of calculation is the one which will afford the most correct result.

Lancashire District.

There is also another exception, with regard to the young assistants of the spinner. It has been thus far the custom for the spinner to detain one or other of these every day in the mill, for the purpose of cleaning the spinning-machine, about twenty minutes beyond the proper time. It has been impossible to make any allowance for this in the Tables, because no inquiry could be framed that would reach the fact. The custom is forbidden by the mill-owners in most mills,—I should say in every Manchester mill without exception; but it has been constantly practised by the spinner, with connivance of the overlooker.

No inquiry sufficiently extended, as far as I know, has hitherto been made to ascertain with certainty the relative proportions of persons employed with reference to age and sex. This, however, is now supplied by the information contained in Supplement (D.); and the information it conveys will hereafter be of considerable use in ascertaining the proportion in which the introduction of further regulations, or further improvements of machinery may increase the demand for infant labour.

In Supplement (E.) the average net earnings of fourteen descriptions of hands employed in the manufacture are given, twelve of these being almost exclusively adults. They are there given from all parts of the district, and are given for each part of the district in Supplement (G.)

It is scarcely necessary to say any thing of the Local Supplementary Tables, as they are framed upon the same principles as the General Supplementary Tables. One thing however it is necessary to point out: of seventy mill-owners who replied accurately to the First Form of inquiry, some did not reply to the Second Form completely, others did not reply to it at all; it has consequently been impossible to calculate the average net earnings realized in these mills *by the hour*, and equally so to ascertain what proportion of hands they employ under the age of fourteen.

Hence they have been arranged in List II., and the elements of accurate calculation which they yield have been taken out, and are attached to the respective Local Supplementary Tables of the places where they are situated. Though it is to be regretted that these gentlemen did not send in the second set of replies, yet in one respect the omission affords room for satisfaction. If we take the average number of hours worked by each operative, (which in Table B. is shown to be 274.6 for the month ending the 4th May,) and apply it to the aggregates of the number employed and amounts earned in these seventy mills, it will be found to yield a result of average net earnings of each operative for sixty-nine hours' work differing very slightly from that obtained from the complete Returns, which is 125.13 pence.

No observations are requisite on the List III. of mills which work at night as well as day.

The primary objects which I had in view in directing the set of Tables now submitted to be constructed and arranged in the form which it exhibits were, to establish beyond all possibility of controversy the average net earnings of a cotton-worker, and then to ascertain the whole number of cotton-workers in England, together with the total amount of their annual earnings, and these objects I consider to have been satisfactorily attained.

Primary objects of the Tables as thus far constructed.

But after the Tables came forth in the shape which they now exhibit, it was my wish to have extracted additional Tables from the Returns, throwing light on other points connected with the price of labour. I regret that neither time nor means were afforded me for this purpose.

Hence in what I am about to say, first, concerning the influence of improvements in machinery on the price of labour; and, secondly, concerning the comparisons so commonly instituted between the rates of wages in different countries, I want some of those means of enforcing my opinions which the Returns themselves, had the tabling of them been permitted to continue, would have abundantly furnished.

Improvements in machinery in all that regards cotton-working are not stationary for a single moment. The machinery which to-day is the most perfect becomes to-morrow second-rate, and very soon third-rate. The cotton, in its progress from the hands of the

Effects of improvements of machinery on wages.

Lancashire District.

porter of the mill who unpacks the bale which comes from the merchant, to those of the overlooker of the mill who receives it from the spinner in the state of twist or yarn, (and which is the first shape in which it becomes once more a marketable commodity,) goes through a number of processes which it would be difficult to enumerate and impossible to describe. Each of them has its peculiar system of machinery, and an improvement in that appropriated to any one of these, affects directly the wages of labour in the process itself, and indirectly those in other correlate processes.

Way in which they produce their effects.

Improvements in machinery, as far as it is requisite to speak of them for the purpose of elucidating the Tables now submitted, produce their effects on the price of labour in the following ways:

First, They render it possible to fabricate some articles which, but for them, could not be fabricated at all.

Secondly, They enable an operative to turn out a greater quantity of work than before, time, labour, and quality of work remaining constant.

Thirdly, They effect a substitution of labour comparatively unskilled for that which is more skilled.

The first of these effects does not suggest considerations of such immediate importance to my present purpose as the two latter. They teem with consequences deeply affecting important social interests.

The following is the principle upon which wages or earnings, in cotton-working *by power*, depend, and I beg particular attention to it.

Principle on which earnings in cotton-working depend.

When the quantity of work executed by an operative in a given time is increased in consequence of an improvement in the machine on which he works, his remuneration *per hour* increases, his remuneration *per pound of work done* decreases.

This principle obtains throughout, though many of the assistants are paid by fixed weekly wages; but as such are either in the direct employ of the superior operative, who is paid according to the foregoing rule or else under the entire controul of the overlooker of a room of machinery, who is paid according to the quantity of work that his room turns out in a given time, the principle in reality prevails throughout.

Illustration of it.

To illustrate the effect which an improvement in machinery produces on earnings, I will take an instance from the spinning department. It will hold good *mutatis mutandis* for every other department.

The spinner is the leading and most important operative in cotton-working. He is the one for whom every preliminary process (called "the preparation," and consisting of carding, &c. &c. &c. &c.) is performed. So much weight of prepared cotton is delivered to him, and he has to return by a certain time in lieu of it a given weight of twist or yarn of a certain degree of fineness, and he is paid so much per pound for every pound that he so returns. If his work is defective in quality, the penalty falls on him; if less in quantity than the minimum fixed for a given time, he is dismissed, and an abler operative procured. The productive power of his spinning-machine is accurately measured, and the rate of pay for work done with it decreases with (though not *as*) the increase of its productive power.

Since these machines are in a state of continual improvement, what effect is thereby produced upon the spinner's earnings? The answer to this question will explain the most important cause of the discrepancies exhibited in the column headed "Average net earnings of each individual calculated for sixty-nine hours," and those likewise in Supplements (E.), (F.), and (G.), and their various Local Supplements, and show whether the ground on which the operatives affirm that their wages are continually falling is sound or unsound.

The mule, or spinning-machine, is a *system* of spindles. A spinner manages two of them at the same time. He stands between them; one is always advancing while the other is retreating, and he turns from one to the other at regular intervals. The one which is advancing draws out the cotton (roving) from the back, and moves slowly towards the spinner, spinning the thread the while. The greater the number of spindles, the greater is the number of threads, and the higher the productive power of the machine. The mules vary in the number of spindles they carry from 200 to 800 each; or for the pair, from

400 to 1,600. The spinner has from one to six juvenile assistants, according to the magnitude of his spinning-machine, whom he engages and pays himself, without reference to his masters. Lancashire District.

The number of spindles measures the productive power of the machine, and the masters and men agree upon a scale of prices for labour varying accordingly. These Scales are printed. Number of spindles measures productive power of the spinning machine.

The following is one of them. It is that at present in force in Manchester.

The first line will explain all the others. It signifies that a spinner, spinning yarn of the fineness of eighty hanks to the pound on a mule the productive power of which is represented by 336 spindles, is to be paid at the rate of $4\frac{1}{2}d.$ the pound of yarn; that if he spins on one of a productive power represented by 348 to 384 spindles, he is to be paid $4\frac{1}{4}d.$ per pound; and if on one of the productive power of 396, at the rate of $4d.$ per pound, and so on, the rate of pay for work done diminishing in proportion as (though not in the *same* proportion as) the productive power of the machine increases.

I give two of these documents, the one actually in force at Manchester dated 5th March 1831, and the one which it superseded. This latter is dated 20th March 1829, and is more in detail.

N^o signifies "number of hanks of yarn to the pound." The figures 336, 348, 396, signify mules carrying respectively those numbers of spindles, and consequently yielding by each effort (technically called the "stretch"), 336, 348, or 396 threads of a given length.

The MANCHESTER LIST of PRICES for spinning upon Mules of the following Sizes, as agreed to by Masters and Men, 5th March 1831. In force in June 1833.

	Spindles, 336 and under.		Spindles, 348 to 384.		Spindles, 396 and above.	
	s.	d.	s.	d.	s.	d.
N ^o 80	0	$4\frac{1}{2}$	0	$4\frac{1}{4}$	0	4
- 85	0	$4\frac{3}{4}$	0	$4\frac{3}{4}$	0	$4\frac{1}{2}$
- 90	0	$5\frac{1}{4}$	0	5	0	5
- 95	0	6	0	$5\frac{1}{2}$	0	$5\frac{1}{4}$
- 100	0	$6\frac{1}{2}$	0	$6\frac{1}{4}$	0	$6\frac{1}{4}$
- 105	0	$7\frac{1}{4}$	0	7	0	$6\frac{3}{4}$
- 110	0	8	0	$7\frac{3}{4}$	0	$7\frac{1}{2}$
- 115	0	9	0	$8\frac{3}{4}$	0	$8\frac{1}{2}$
- 120	0	10	0	$9\frac{3}{4}$	0	$9\frac{1}{2}$
- 125	0	$11\frac{1}{4}$	0	11	0	$10\frac{3}{4}$
- 130	1	$0\frac{1}{2}$	1	0	0	$11\frac{3}{4}$
- 135	1	$1\frac{3}{4}$	1	$1\frac{1}{4}$	1	$0\frac{3}{4}$
- 140	1	3	1	$2\frac{1}{4}$	1	2
- 145	1	$4\frac{1}{4}$	1	$3\frac{3}{4}$	1	$3\frac{1}{4}$
- 150	1	$5\frac{1}{2}$	1	5	1	$4\frac{1}{2}$
- 155	1	$6\frac{3}{4}$	1	$6\frac{1}{4}$	1	$5\frac{3}{4}$
- 160	1	8	1	$7\frac{1}{2}$	1	7
- 165	1	10	1	$9\frac{1}{2}$	1	$8\frac{3}{4}$
- 170	2	0	1	$11\frac{1}{2}$	1	$10\frac{1}{2}$
- 175	2	$2\frac{1}{2}$	2	$1\frac{3}{4}$	2	$0\frac{3}{4}$
- 180	2	5	2	4	2	3
- 185	2	8	2	7	2	6
- 190	2	11	2	10	2	$8\frac{3}{4}$
- 195	3	$2\frac{1}{2}$	3	$1\frac{1}{2}$	3	$0\frac{1}{4}$
- 200	3	6	3	5	3	4
- 205	3	10	3	9	3	8
- 210	4	2	4	1	4	0
- 215	4	7	4	$5\frac{1}{2}$	4	$4\frac{1}{2}$
- 220	5	0	4	10	4	9
- 225	5	6	5	4	5	3
- 230	6	0	5	10	5	9
- 235	6	$7\frac{1}{2}$	6	5	6	4
- 240	7	3	7	0	6	11
- 245	8	$0\frac{1}{2}$	7	9	7	8
- 250	8	10	8	6	8	5

(D.1.)

* R

The MANCHESTER LIST of PRICES for spinning upon Mules of different Sizes.*

	Spindles, 300.	Spindles, 312.	Spindles, 324.	Spindles, 336.	Spindles, 348.	Spindles, 360.	Spindles, 372.	Spindles, 384.	Spindles, 396.	Spindles, 408.	Spindles, 420.	Spindles, 432.	Spindles, 444.	Spindles, 456.	Spindles, 468.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
N ^o 80	0 5	0 5	0 4 $\frac{3}{4}$	0 4 $\frac{3}{4}$	0 4 $\frac{3}{4}$	0 4 $\frac{1}{2}$	0 4 $\frac{1}{2}$	0 4 $\frac{1}{2}$	0 4 $\frac{1}{2}$	0 4 $\frac{1}{4}$	0 4 $\frac{1}{4}$	0 4 $\frac{1}{4}$	0 4	0 4	0 4
- 85	0 5 $\frac{1}{2}$	0 5 $\frac{1}{2}$	0 5 $\frac{1}{4}$	0 5 $\frac{1}{4}$	0 5 $\frac{1}{4}$	0 5	0 5	0 5	0 4 $\frac{3}{4}$	0 4 $\frac{3}{4}$	0 4 $\frac{1}{2}$	0 4 $\frac{1}{2}$	0 4 $\frac{1}{2}$	0 4 $\frac{1}{2}$	0 4 $\frac{1}{2}$
- 90	0 6	0 6	0 5 $\frac{3}{4}$	0 5 $\frac{3}{4}$	0 5 $\frac{3}{4}$	0 5 $\frac{1}{2}$	0 5 $\frac{1}{2}$	0 5 $\frac{1}{2}$	0 5 $\frac{1}{4}$	0 5 $\frac{1}{4}$	0 5	0 5	0 5	0 5	0 5
- 95	0 6 $\frac{3}{4}$	0 6 $\frac{3}{4}$	0 6 $\frac{1}{2}$	0 6 $\frac{1}{2}$	0 6 $\frac{1}{4}$	0 6 $\frac{1}{4}$	0 6	0 6	0 5 $\frac{3}{4}$	0 5 $\frac{3}{4}$	0 5 $\frac{1}{2}$	0 5 $\frac{1}{2}$	0 5 $\frac{1}{2}$	0 5 $\frac{1}{2}$	0 5 $\frac{1}{2}$
- 100	0 7 $\frac{1}{2}$	0 7 $\frac{1}{2}$	0 7 $\frac{1}{4}$	0 7 $\frac{1}{4}$	0 7	0 7	0 6 $\frac{3}{4}$	0 6 $\frac{3}{4}$	0 6 $\frac{1}{2}$	0 6 $\frac{1}{2}$	0 6 $\frac{1}{4}$	0 6 $\frac{1}{4}$	0 6 $\frac{1}{4}$	0 6 $\frac{1}{4}$	0 6 $\frac{1}{4}$
- 105	0 8 $\frac{1}{4}$	0 8 $\frac{1}{4}$	0 8	0 8	0 7 $\frac{3}{4}$	0 7 $\frac{3}{4}$	0 7 $\frac{1}{2}$	0 7 $\frac{1}{2}$	0 7 $\frac{1}{4}$	0 7 $\frac{1}{4}$	0 7	0 7	0 6 $\frac{3}{4}$	0 6 $\frac{3}{4}$	0 6 $\frac{3}{4}$
- 110	0 9 $\frac{1}{4}$	0 9 $\frac{1}{4}$	0 9	0 8 $\frac{3}{4}$	0 8 $\frac{3}{4}$	0 8 $\frac{1}{2}$	0 8 $\frac{1}{2}$	0 8 $\frac{1}{4}$	0 8 $\frac{1}{4}$	0 8	0 7 $\frac{3}{4}$	0 7 $\frac{1}{2}$	0 7 $\frac{1}{2}$	0 7 $\frac{1}{2}$	0 7 $\frac{1}{2}$
- 115	0 10 $\frac{1}{4}$	0 10 $\frac{1}{4}$	0 10	0 9 $\frac{3}{4}$	0 9 $\frac{3}{4}$	0 9 $\frac{1}{2}$	0 9 $\frac{1}{2}$	0 9 $\frac{1}{4}$	0 9	0 8 $\frac{3}{4}$	0 8 $\frac{3}{4}$	0 8 $\frac{1}{2}$	0 8 $\frac{1}{2}$	0 8 $\frac{1}{2}$	0 8 $\frac{1}{2}$
- 120	0 11 $\frac{1}{2}$	0 11 $\frac{1}{4}$	0 11	0 11	0 10 $\frac{3}{4}$	0 10 $\frac{3}{4}$	0 10 $\frac{1}{2}$	0 10 $\frac{1}{4}$	0 10	0 9 $\frac{3}{4}$	0 9 $\frac{3}{4}$	0 9 $\frac{1}{2}$	0 9 $\frac{1}{2}$	0 9 $\frac{1}{4}$	0 9 $\frac{1}{4}$
- 125	1 0 $\frac{3}{4}$	1 0 $\frac{1}{2}$	1 0 $\frac{1}{4}$	1 0 $\frac{1}{4}$	1 0	1 0	0 11 $\frac{3}{4}$	0 11 $\frac{1}{2}$	0 11 $\frac{1}{4}$	0 11	0 10 $\frac{3}{4}$	0 10 $\frac{1}{2}$	0 10 $\frac{1}{2}$	0 10 $\frac{1}{4}$	0 10 $\frac{1}{4}$
- 130	1 2 $\frac{1}{4}$	1 2	1 1 $\frac{3}{4}$	1 1 $\frac{1}{2}$	1 1 $\frac{1}{2}$	1 1 $\frac{1}{4}$	1 1	1 0 $\frac{3}{4}$	1 0 $\frac{1}{2}$	1 0 $\frac{1}{4}$	1 0	0 11 $\frac{3}{4}$	0 11 $\frac{3}{4}$	0 11 $\frac{1}{2}$	0 11 $\frac{1}{2}$
- 135	1 3 $\frac{1}{2}$	1 3 $\frac{1}{4}$	1 3	1 2 $\frac{3}{4}$	1 2 $\frac{3}{4}$	1 2 $\frac{1}{2}$	1 2 $\frac{1}{4}$	1 2	1 1 $\frac{3}{4}$	1 1 $\frac{1}{2}$	1 1 $\frac{1}{4}$	1 1	1 0 $\frac{3}{4}$	1 0 $\frac{1}{2}$	1 0 $\frac{1}{4}$
- 140	1 5	1 4 $\frac{3}{4}$	1 4 $\frac{1}{2}$	1 4 $\frac{1}{4}$	1 4	1 3 $\frac{3}{4}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{4}$	1 3	1 2 $\frac{3}{4}$	1 2 $\frac{1}{2}$	1 2 $\frac{1}{4}$	1 2	1 1 $\frac{3}{4}$	1 1 $\frac{1}{2}$
- 145	1 6 $\frac{1}{2}$	1 6 $\frac{1}{4}$	1 6	1 5 $\frac{3}{4}$	1 5 $\frac{1}{4}$	1 5	1 4 $\frac{3}{4}$	1 4 $\frac{1}{2}$	1 4 $\frac{1}{4}$	1 4	1 3 $\frac{3}{4}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{4}$	1 3	1 2 $\frac{3}{4}$
- 150	1 8	1 7 $\frac{3}{4}$	1 7 $\frac{1}{2}$	1 7 $\frac{1}{4}$	1 6 $\frac{3}{4}$	1 6 $\frac{1}{2}$	1 6 $\frac{1}{4}$	1 6	1 5 $\frac{3}{4}$	1 5 $\frac{1}{4}$	1 5	1 4 $\frac{3}{4}$	1 4 $\frac{1}{2}$	1 4	1 3 $\frac{1}{2}$
- 155	1 9 $\frac{1}{2}$	1 9 $\frac{1}{4}$	1 8 $\frac{3}{4}$	1 8 $\frac{1}{2}$	1 8	1 7 $\frac{3}{4}$	1 7 $\frac{1}{2}$	1 7 $\frac{1}{4}$	1 7	1 6 $\frac{1}{2}$	1 6 $\frac{1}{4}$	1 6	1 5 $\frac{3}{4}$	1 5 $\frac{1}{2}$	1 5
- 160	1 11	1 10 $\frac{1}{2}$	1 10 $\frac{1}{4}$	1 10	1 9 $\frac{1}{2}$	1 9 $\frac{1}{4}$	1 9	1 8 $\frac{1}{2}$	1 8 $\frac{1}{4}$	1 7 $\frac{3}{4}$	1 7 $\frac{1}{2}$	1 7 $\frac{1}{4}$	1 7	1 6 $\frac{1}{2}$	1 6
- 165	2 1	2 0 $\frac{3}{4}$	2 0 $\frac{1}{4}$	2 0	1 11 $\frac{1}{2}$	1 11	1 10 $\frac{3}{4}$	1 10 $\frac{1}{4}$	1 10	1 9 $\frac{3}{4}$	1 9 $\frac{1}{2}$	1 9	1 8 $\frac{3}{4}$	1 8 $\frac{1}{4}$	1 8
- 170	2 3 $\frac{1}{4}$	2 3	2 2 $\frac{1}{2}$	2 2	2 1 $\frac{1}{2}$	2 1	2 0 $\frac{3}{4}$	2 0 $\frac{1}{4}$	2 0	1 11 $\frac{3}{4}$	1 11 $\frac{1}{2}$	1 11	1 10 $\frac{1}{2}$	1 10	1 9 $\frac{1}{2}$
- 175	2 6	2 5 $\frac{1}{2}$	2 5	2 4 $\frac{1}{2}$	2 4	2 3 $\frac{1}{2}$	2 3 $\frac{1}{4}$	2 2 $\frac{3}{4}$	2 2 $\frac{1}{4}$	2 2	2 1 $\frac{1}{2}$	2 1	2 0 $\frac{3}{4}$	2 0 $\frac{1}{4}$	1 11 $\frac{1}{2}$
- 180	2 8 $\frac{3}{4}$	2 8 $\frac{1}{4}$	2 7 $\frac{3}{4}$	2 7 $\frac{1}{4}$	2 6 $\frac{3}{4}$	2 6 $\frac{1}{4}$	2 6	5 $\frac{1}{4}$	2 4 $\frac{3}{4}$	2 4 $\frac{1}{4}$	2 3 $\frac{3}{4}$	2 3 $\frac{1}{4}$	2 3	2 2 $\frac{1}{2}$	2 2

20th March 1829.

(Signed) G. E. AUBREY.

Operative earns more money in the same time than formerly.

If these documents be inspected it will be seen that the ratio of the diminution in the payment for work done is less than that of the increase of the productive power of the machine. Hence the perfect machine enables the operative to earn more money in a given time than the imperfect machine.

While I was at Manchester the predominant fear among the most intelligent operatives was, that improvements in machinery would gradually "drive their wages down to nothing," and this was one of their motives for agitating for the Ten Hour Bill. This measure they thought, by lessening production, would counteract the tendency of improvements in machinery, and keep their actual earnings steady. It is certainly important to examine the foundations of an opinion which produces, as we have seen, such extensive influence upon the social action of large bodies of persons.

By adverting to the document which stands first it will be seen, that a spinner spinning twist of the fineness of eighty hanks to the pound on a machine of the productive power represented by 336 is paid at the rate of 4 $\frac{1}{2}$ d. for every eighty hanks that he turns off, while, if he spins on one of the superior power of 396, he is only paid at the rate of 4d. for the same quantity. But the second machine turns off thirty-three pounds of yarn during the same time that the other is employed in turning off only twenty-eight pounds. The ratio of inferiority is then as 28 : 33.

But 28 lbs. at 4 $\frac{1}{2}$ d. the pound gives 126 pence as the earnings made on the first machine during the time which enables the operative on the second to earn 132 pence. Thus the operative gains 6d., and the master 16 $\frac{1}{2}$ d.

* I have thought it unnecessary to give this document in its whole length. I have stopped at No. 180.

Improvements in machinery, producing similar effects, are daily and hourly going on in all branches of cotton-working. It having been stated to me by George Murray Esq., the proprietor of one of the largest fine spinning-mills in Manchester, that "he doubted whether it would be possible to apply such large mules as are now used in fine spinning to coarse spinning, where the motion is more rapid and the weight of the machine greater, but that it was a matter of opinion in which he might be mistaken,"—I sent for the machine-maker of one of the largest coarse spinning-mills in Manchester, a workman of the first class, and asked his opinion on Mr. Murray's evidence; his answer was:—(See D. 1. 132. First Report, Factory Commission.)

"I should say, that with the knowledge that mechanics have now-a-days how to reduce friction to a minimum, and with the superior accuracy of their work, a spinner can manage two mules of 600 spindles for coarse spinning with as much ease to himself, and with as much or more rapidity of the machinery, than he did two mules of 300 spindles each ten years ago. I have not seen mules of 600 spindles for coarse work yet fitted up; but I have myself fitted up a pair of mules for my master of 512 spindles each for coarse work, and they answer so well that I see that I could easily and certainly add 100 hundred spindles to them. Mule-making is improving every day in Manchester."

It thus appears, that mules carrying 500 spindles are already introduced with success for coarse spinning, and that mules carrying 600 spindles will be probably introduced forthwith. In this stage of the progress of improvement the productive power of the machine will be augmented by one fifth in the course of a few months. When this event takes place the spinner will not be paid at the same rate for work done as he was before; but as that rate will not be diminished in the ratio of one fifth, the improvement will augment his money earnings for any given number of hours' work. The whole benefit arising from the improvement is divided between the master and the operative. Both the profits of the one and the earnings of the other are simultaneously increased by it.

When an improvement takes place both the profits of the master and earnings of the operative increased by it.

The foregoing statement must, however, be qualified. Though it is clearly shown that improvements in machinery of the character which I have been describing increase the earnings of the operative, while they augment the profits of the capitalist, yet those who dispute the former conclusion will say that I have selected a particular case to illustrate my position, and omitted an element of importance in stating it,—that the spinner does not appropriate the whole of the surplus 6*d.*; that in consequence of the increased magnitude of his machine he requires additional juvenile aid, the payment for which is at his own private cost, and absorbs a part of his apparent gain.

This objection belongs to a department of the question of which I am treating, of the utmost importance. The effect of improvements in machinery, not merely in superseding the necessity for the employment of the same quantity of adult labour as before in order to produce a given result, but in substituting one species of human labour for another,—the less skilled for the more skilled, juvenile for adult, female for male,—causes a fresh disturbance in the rate of wages. It is said to lower the rate of earnings of adults by displacing a portion of them, and thus rendering their number superabundant as compared with the demand for their labour. It certainly augments the demand for the labour of children, and increases the rate of their wages.

If any check were given to the cotton manufacture, nay, if its continual expansion shall not prove sufficiently great to re-absorb those adults whom it is continually casting out, then the improvements in machinery might be said to have a tendency to "lower wages;" but hitherto these improvements have materially benefited the operatives, not only by enabling a greater number of persons to enjoy the advantage of the enormous rate of earnings attainable in this important branch of human industry than would otherwise have been the case, but they have enabled "an operative" (speaking in general) to earn a greater sum of money at the end of the week than he would have earned had the state of machinery remained stationary.

Could we suppose that machinery were suddenly to reach a degree of perfection which dispensed altogether with adult labour, while no greater number of adolescents and children

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than are at present employed would be required for turning off the quantity of work now executed, it is clear that the adults would be forced to compete with children in the labour market, and that their earnings would be regulated by those of children.

Fortunately for the state of society in the cotton district of England the improvements in machinery are gradual, or at any rate brought very gradually into general use. Hence the fall in the price of the manufactured article is gradual, and the extension of the demand for it, arising from the decrease of price, bringing it continually within the range of the means of greater numbers of consumers is likewise gradual, and keeps up the demand for adult labour, and thus counteracts the effect of the improvements of machinery which operate to displace it. Hence no diminution of earnings for adults has thus far arisen.

To display the effects which improvements in machinery actually produce on the price of labour, both adult and juvenile, and how they produce them, I will exhibit the analysis of the *personel* of three mills, in the shape necessary for the purpose.

Analysis of three mills, showing that the improvements in their machinery will augment the earnings of the operatives whom they employ.

The mills in question are all "fine-spinning" mills in Manchester, spinning yarn of the quality of 110 up to 210 hanks to the pound. The number of operatives which they employed in May 1833 is shown, and is divided into adults and non-adults of the two sexes. The productive power of the spinning-machines (mules) was respectively 336, 324, and 312, and each mill was then preparing to double the mules, *i. e.* to double their productive power. It is to be borne in mind that the spinner always manages two mules.

The deductions of adult hands and the additions of juvenile ones are based upon the following calculations. I instance them only from the mill (A.), the process being the same with respect to mills (B.) and (C.)

In mill (A.) twenty-five men work twenty-five pair of mules of 336 spindles each mule; this makes the total number of spindles 16,800, and the men are assisted by eighty-eight boys and twenty-four girls as piecers of the threads. Now the spinner himself, spinning the quality of work executed in these three mills, can only attend, upon an average, to the piecing up 48 threads on each of his mules,* which gives ninety-six threads as his share for the pair of mules, and this for twenty-five spinners gives a total of 2,400 threads out of the 16,800 to which the spinners can attend. This leaves 14,400 threads to be attended to by 112 piecers (boys and girls), which gives 128 as the average number of threads attended to by each piecer in mill (A.)

Now the spinner, having to attend to the entire guidance of the mule, cannot look after more threads on a *large* mule than he can on a *small* one; and when the number of mules in mill (A.) shall be reduced from twenty-five pair to thirteen, he will still be unable to look after more than ninety-six threads; and as the number of spinners will be reduced to thirteen, so the whole number of threads which the whole number of spinners will then be able to piece up will be 1,248 (instead of 2,400), this will leave 15,552 threads to be pieced up by the piecers; hence 121 piecers will be required, (instead of 112 as previously,) if the same average of threads per piecer is still taken. In point of fact, however, the same average ought not to be taken, as the more convenient form which the mule will assume will enable the piecers (though it will not the spinners) to look after a greater number of threads than before, and hence so many as nine piecers need not be added to the number previously employed.

Assuming therefore such proportions, and applying them to all the three mills, each proportion calculated for each mill respectively, the total number of adults dismissed will be seventy-five, and that of juvenile hands who supersede them will be fifty-seven.

* I state this upon the authority of the overlooker of one of these mills, whom I repeatedly examined on the point.

Mill (A.), possessing twenty-five pair of mules of the productive power of 336 spindles each mule, and spinning yarn of the fineness of 170 to 210 hanks to the pound, Lancashire District, with the following *personel* :—

	Men.	Women.	Boys.	Girls.
Manager - - - - -	1	—	—	—
Clerk - - - - -	—	—	1	—
Picking-master - - - - -	1	—	—	—
Pickers and batters - - - - -	—	20	—	—
Engineers - - - - -	1	—	—	—
Carder - - - - -	1	—	—	—
Card-grinders - - - - -	2	—	—	—
Top-card strippers - - - - -	2	—	—	—
Drawing-frame tenters - - - - -	—	6	—	—
Skellet-tenters - - - - -	—	1	—	1
Slubbers - - - - -	1	—	—	—
Stretchers - - - - -	—	3	—	—
Back-tenters - - - - -	—	—	—	4
Roving sorter - - - - -	—	1	—	—
Wrapper - - - - -	—	1	—	—
SPINNERS - - - - -	25	—	—	—
PIECERS - - - - -	—	—	88	24
Watchman - - - - -	—	—	—	—
Mechanic occasionally - - - - -	1	—	—	—
Totals in May 1833 - - -	36	32	89	29
The twenty-five pair of mules were to be made into thirteen pair of 636 spindles each mule, when twelve of the twenty-five adult spinners will be dismissed, and nine additional piecers employed - - - - -	— 12	—	+ 9	—
The <i>personel</i> will then be - - - - -	24	32	98	29

Mill (B.), possessing twenty pair of mules of the productive power of 324 spindles each mule, and spinning yarn of the fineness of 120 to 210 hanks to the pound, with the following *personel* :—

	Men.	Women.	Boys.	Girls.
Clerk - - - - -	1	—	—	—
Machine-tenter - - - - -	1	—	—	—
Cotton-pickers - - - - -	—	8	—	—
Carder - - - - -	1	—	—	—
Spreader - - - - -	—	—	3	—
Card-grinder - - - - -	1	—	—	—
Top-card strippers - - - - -	3	—	—	—
Card-tenters - - - - -	—	—	2	—
Card-brushers and cylinder-stripper - - - - -	1	—	—	—
Drawing-frame tenter - - - - -	—	6	—	—
Roving-frame tenter - - - - -	—	1	—	—
Jack-tenter - - - - -	—	1	—	—
Stretchers - - - - -	3	—	—	—
Back-tenters - - - - -	—	3	—	2
Roving sorter - - - - -	—	1	—	—
SPINNERS - - - - -	20	—	—	—
PIECERS - - - - -	—	—	63	17
Reelers and wrapper - - - - -	—	4	—	—
Engineer - - - - -	1	—	—	—
Mechanic occasionally - - - - -	1	—	—	—
Totals in May 1833 - - -	33	24	68	19
The twenty pair of mules were to be made into ten of 648 spindles each mule, when ten adult spinners will be dismissed, and seven additional piecers employed - - - - -	— 10	—	+ 7	—
And the <i>personel</i> will stand thus (D.1.) - - - - -	23	24	75	19

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Mill (C.), possessing 103 pair of mules of the productive power of 312 spindles each mule, and spinning yarn of the fineness of 140 to 210 hanks to the pound, with the following *personel*:—

	Men.	Women.	Boys.	Girls.
Manager - - - - -	1	—	—	—
Clerk - - - - -	1	—	—	—
Taker in from spinners and reellers - - -	1	—	—	—
Picking-master - - - - -	2	—	—	—
Pickers - - - - -	—	90	—	—
Head carder - - - - -	1	—	—	—
Assistant carders - - - - -	2	—	—	—
Card-grinder - - - - -	4	—	—	—
Cylinder-stripper - - - - -	2	—	—	—
Top-card stripper - - - - -	12	—	—	—
Spreaders - - - - -	—	—	14	—
Card-tenters - - - - -	—	—	13	—
Bushers, &c. - - - - -	3	—	—	—
Drawing-frame tenters - - - - -	—	28	—	—
Jack-frame tenters - - - - -	—	13	—	—
Stretchers - - - - -	—	14	—	—
Back-tenters - - - - -	—	—	—	14
Roving sorter - - - - -	—	3	—	—
Overlookers - - - - -	2	—	—	—
SPINNERS - - - - -	103	—	—	—
PIECERS - - - - -	—	—	306	97
Wrapper - - - - -	—	1	—	—
Reellers - - - - -	—	15	—	—
Yarn examiners - - - - -	1	—	—	—
Makers up, &c. - - - - -	—	—	3	—
Mechanics - - - - -	6	—	—	—
Watchman - - - - -	1	—	—	—
Engineer - - - - -	1	—	—	—
Fireman - - - - -	1	—	—	—
Roller coverers - - - - -	2	—	—	—
Lodge-tenter and strap-mender - - - - -	1	—	—	—
Totals in May 1833 - - - - -	147	164	336	111
The 103 pair of mules were to be made into fifty pair of 648 spindles each mule, when fifty-three adult spinners would be dismissed, and forty-one additional piecers employed -	— 53		+ 41	
And the <i>personel</i> will stand thus -	94	164	377	111

I have explained the grounds on which I have deducted seventy-five adults, and added fifty-seven non-adults, after the improvement. Now, though I might fairly estimate the average earnings of a "fine" spinner (which they all are in these three mills) on mules of 336 spindles at 35s. net the week, yet I will only take them at 25s. Then the total amount of saving in adult labour by superseding seventy-five spinners will be £93. 15s. 10d. a week, and the additional cost for the labour of fifty-seven additional piecers will be (if they are averaged at 5s. each for the week) £14. 5s.

But in this case the earnings of each of the remaining spinners will be increased, as is evidenced by the printed list of prices for spinning, which shows that the price paid for work done diminishes in a ratio less rapid than that in which the productiveness of the mule increases; and as the process by which this is effected creates an additional demand for children, the average of their wages must have a tendency to rise; and since the article produced can be offered in the market of the world at a lower price in consequence of the diminished cost of production which results from the large saving in wages of labour produced by the improvement of the machine, it is then brought, *for the first time*, within the range of the means of a large class of consumers who never used it before. This must create a demand

for a greater quantity of it, enlarge the field of production, and cause a speedy re-absorption of the seventy-five adults who have been superseded, and who then benefit by the enhanced rate of earnings produced by the very improvement which primarily caused their displacement, and there then ensues a *new* and *additional* demand for children to assist *them*.

As this process is always going on, as new mills are constantly being built, and old ones enlarged and improved, so the displacement of adults by the introduction of new inventions in machinery never becomes sensible, and the cotton-working population has swollen to a magnitude second only to that of the agricultural.

So far with regard to the general effect on wages produced by the improvement. Now with regard to the objection that the spinner does not appropriate the whole of the benefit which at first sight appears to fall entirely to his share. I admit that the objection which has led to my discussing this point is grounded on fact; I admit, in the case which I selected to show that the spinner would receive 6*d.* more from spinning on mules of the power of 396 instead of 336, that he will not appropriate the whole of the 6*d.*; but I assert that his net earnings will still be much increased by the improvement.

In the cases of the three mills, A, B, & C, which I have taken, there were 148 spinners, who employed and paid 595 piecers. The improvements displace seventy-five of the spinners, and the remaining seventy-three have not only to pay, out of their receipts for work done, the wages of the 595 piecers, (previously paid by the whole 148,) but likewise of forty-one additional piecers, which will amount to the sum of £14. 5*s.* I admit that this amount of £14. 5*s.*, as well as that the whole amount of the wages of the 595 piecers, will be thrown entirely on the earnings of the remaining seventy-three spinners, but I assert that the net earnings of every one of those seventy-three spinners will nevertheless be greater for any given number of hours' work, after the improvement, than it was before it.

In the year 1833, in two fine spinning-mills at Manchester which I need not name, and while I was in the town, a spinner could produce sixteen pounds of yarn of the fineness of 200 hanks to the pound from mules of the productive fertility of 300 to 324, working them sixty-nine hours; and the quantity that he turned off in sixty-nine hours more frequently exceeded sixteen pounds than fell short of it.

These very mules were being replaced by others of double power while I was at Manchester. Let us examine the effect on the spinner's earnings:—In the early part of last year he produced sixteen pounds of yarn of No. 200 from mules of the power of 300 to 324 spindles. Consulting the List of Prices, I perceive that in May he was paid 3*s.* 6*d.* a pound; this gives 54*s.* for his gross receipts, out of which he had to pay (I will put the amount high) 13*s.* for assistants. This leaves him with 41*s.* earnings. His mules have their productive fertility doubled. They are converted into ones of the power of 648. He is now paid 2*s.* 5*d.* a pound instead of 3*s.* 6*d.* But he produces thirty-two pounds of yarn of the fineness of 200 hanks to the pound in sixty-nine hours. His gross receipts are immediately raised to 77*s.* 4*d.* I will now admit that he requires *five* assistants to help him, and, averaging their cost at 5*s.* a piece, their labour will cost him 25*s.*, and, to avoid all cavil, I will add 2*s.* extra. Then, deducting 27*s.* from his gross receipts, there remains a sum of 50*s.* 4*d.* for his net earnings for sixty-nine hours' work, instead of 41*s.**

Therefore, reverting back to the three mills, A, B, C, I mean to say that, after the change in the machinery shall have displaced seventy-five spinners, each of the remaining seventy-

Analysis of effects of Improvements on the price of adult and juvenile labour.

Earnings of spinner will be increased, notwithstanding he has to pay more children after the improvement.

* While this Paper has been going through the press, I have received the history in detail of every week's work of a pair of mules, spinning No. 200, and carrying 360 spindles each mule; and this pair of mules turned off between Christmas day 1832 and Christmas day 1833, 1,065 lbs. 8½ oz. of yarn of the fineness of No. 197 hanks to the pound; and during the year the mill in which the mules are situated lost fifteen days' work, of eleven hours and a half each day, by holidays and stoppages of the engine. Nevertheless the average weight turned off in a week is 20.49 lbs. This document enables me to give the quantity of No. 200 which a pair of mules of 300 spindles would turn off in a week, working eleven hours and a half each day, and it is 16.46 lbs. Consequently, in the proof which I have tendered above, to show that "the earnings of a spinner spinning yarn of the fineness of 200 hanks to the pound, on mules of the productive power of 300 to 324, will be augmented in the ratio of forty to fifty, by an improvement which raises the productive power of his mule to 648," I have been under the mark as to the amount of his earnings. They will be greater than I have stated them to be.

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three will be gaining at the rate of 50s. and upwards, instead of gaining at the rate of 40s. and upwards, for equal times, and for similar qualities of work, though he then will have to pay more than double the number of assistants that he previously paid; and hence it must likewise be obvious, that when I stated the actual net earnings of a spinner at no more than £1. 5s. for sixty-nine hours' work, I was greatly within the mark. I know that when I was in Manchester the net earnings of a spinner in the three mills in question, with the machinery in its then state, varied from 32s. to 43s. for sixty-nine hours' work, according to the work which they might be executing at the moment, as that might vary between the extremes of "yarn of the fineness of 120 hanks" and "that of 210 hanks" to the pound.

A large portion of those discrepancies exhibited by the Tables in the rate of net earnings realized by an operative for sixty-nine hours' work (comparing mills performing the same kind of work) is to be accounted for by the different proportions which the respective qualities of their machinery enable the various owners to establish between the numbers of the skilled and those of the unskilled operatives whom they employ; and had I been afforded the time and means of compiling a second set of Tables from the returns to the Lancashire form of inquiry, it would exhibit the ratio which juvenile bears to adult labour in the leading departments of each mill, and have contained the average earnings of an operative of each class, as to age and sex, for sixty-nine hours' work. The result, I have no doubt, would have shown in detail that the earnings of the adult were the largest in mills where the ratio of the number of children to the number of adults was the highest; and that as long as the cotton-working business continues to extend, the apprehensions entertained by the operatives of a fall in wages either for adults or children, consequent upon improvements in machinery, are groundless. Their assertion is (and it was repeated to me innumerable times), that they have to turn out more work now for less wages than formerly. The Manchester and Salford Advertiser, which is the journal of the operatives, scarcely publishes a number which does not ring the changes on this assertion, and in that for the 11th of January it asserts "that a spinner now turns out double the work for a tenth less wages than in 1804."

The matter stands thus:—In 1804 a spinner was paid 8s. 6d. for every pound of yarn of the fineness of 200 hanks to the pound, spinning on a mule of the average productive power at that time. What that productive power was I do not know. But in 1829 he was paid at the rate of 4s. 1d. for spinning the same quality on a mule of the productive power of 312; in 1831, and at present, at the rates of 2s. 5d. and 2s. 8½d. for spinning the same quality on a mule of the productive power of 648. These quotations are from the Manchester prices.

Spinner earned more in 1833 than he did in 1829.

Thus in 1829 the spinner turned off 312 pounds of yarn in the same time that he now takes to turn off 648. He was paid at the rate of 4s. 1d. per lb. in 1829; he is now paid at the rate of 2s. 5d. But 312 lbs. at 4s. 1d. amount to 1,274 shillings, and 648 lbs. at 2s. 5d. to 1,566 shillings. He receives, therefore, 292 shillings more than he did in 1829 for equal times of work. It is perfectly true that he does "more work for less wages than in 1829;" but this is nothing to the purpose, when the proposition to be proved is, that "wages are lower than formerly." I mean to say, that a spinner earns a shilling, or a pound, or an hundred pounds, in less time at present than he would have consumed in earning a shilling, or a pound, or an hundred pounds, ten years ago, and with the same or less labour; that this enhancement of his earnings has been owing to improvements in machinery; that the progress of improvements will progressively advance his earnings still higher, and at the same time enable a greater number of individuals to profit by the enhanced rate than actually profits by the actual rate (provided that nothing occurs to prevent the cotton business from developing itself for the next thirty years as it has done for the last); and that any improvement in the machinery in any one of the numerous departments of cotton-working will operate to enhance the rate of wages in all other branches (as well as in that department in which it takes place), by increasing the actual previous demand for labour in those other branches. I assert that every improvement of cotton machinery, in any department of cotton-working, has hitherto had the effect of enabling "an operative" (speaking in general of every one, in every department whatever) to earn a greater net amount of money, in any given time, than he would have done had the improvement never taken place.

Improvements in machinery will continue to augment the earnings of operatives as long as the cotton business continues to expand.

Misconceptions of the effects of ma-

The misconceptions as to the real effect of machinery on the price of labour which the operatives

operatives entertain are the causes of turn-outs and strikes; they produce rankling discontent towards their masters, and I regret that I have not had the opportunity of giving them a fuller exposure.

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I certainly consider it of great consequence that the operatives themselves should be satisfied that improvements in machinery tend to raise the amount of money that they gain, individually and generally, for the same number of hours' work. Those who dispute the fact must, I think, admit that I have established it in the instance of the three mills I have selected, as far as *Spinners* are concerned; and as they must likewise admit that the improvement specified creates a fresh and additional demand for young hands, they must also admit that the wages of young hands are augmented in consequence. They must equally admit, that as the price of the article will be lowered in the market from the effects of the improvement, more of it will be consumed; and hence that, in all the correlate processes connected with spinning of cotton, more hands will be required, and consequently that wages throughout the whole range of cotton-working will be better than they were before. If these considerations should induce operatives to hesitate before they combine and turn out against new machinery, before they again cabal for shortening the hours of work, in order to counteract the (fancied) injurious effect upon wages of improvements in machinery, and lead them to neglect the instances of those who urge them "to strike for eight hours' work and twelve hours' earnings" (and this is the advice they have lately received), my purpose will be answered.

chinery on wages
cause turn-outs
and strikes.

The generality of the operatives in cotton-working are well-meaning, respectable, shrewd, and sensible; and I believe that if the real effect of machinery, in augmenting the actual rate of their earnings and in enabling a greater number of persons to benefit by the augmented rate, could be fairly set before them, and rendered familiar to their minds, it would have a most beneficial effect upon their actions as members of society.

I will now proceed to state what occurs to me on the subject of the comparisons so frequently instituted between the rates of wages in different countries, confining my remarks solely to cotton-working

Relative to com-
parisons between
rates of wages in
different countries

The discrepancies visible in the average rate of net earnings in the list of 151 mills, comparing mills performing similar quality of works, and those exhibited in the General and Local Supplementary Tables in the average net earnings of operatives of the same denomination, are mainly to be accounted for by the different proportions which the different states of perfection in machinery in different mills and districts establish in the employment of adult and non-adult labour. Other causes no doubt exist of a totally different class. Nevertheless, by a strict analysis of the Returns themselves, exhibiting the proportions which infant, adolescent, and adult labour bear to one another in every department of each of the 151 mills, and comparing these results with the quality of work done in each mill, I think, judging from my knowledge of the character of the Returns, that it might be possible to fix the limits within which the "rate of payment for work done" really ranges. This problem it would be most important to solve.

I passed but eight weeks in the factory investigation, and during that time was unable to contrive any means for ascertaining, *in general*, the rate of payment for work done in cotton-working. When, however, I saw the satisfactory manner in which the answers to the second Form of Inquiry were coming in, I should have proposed, had the investigation continued a fortnight longer, to have issued a Form requiring the total quantity of work done in the spinning department during the month ending May the 4th, the number of spindles producing it, and the number of spinning-machines (mules) on which the spindles were placed, for every mill. Even a few Returns from mills of each class, combined with those already procured, would have thrown much light on this topic; and the extraordinary readiness which the masters displayed in general to facilitate all feasible and reasonable inquiries convince me that many such Returns would have been made.

At present I know of no accurate means of comparing the rate of payment for work done in cotton-working prevailing in England with that prevailing in foreign countries, however confidently it may be asserted that the rate of wages is higher here than it is abroad.

No means of
making them
accurately.

But though I could not procure any general knowledge on this matter derived from a systematic investigation of it, yet many particular facts throwing light upon it fell under my observation, some of which I will adduce. They will afford a test of the value of that

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evidence regarding the rate of wages which is so generally proffered, and so easily received.

Though the following Tables exhibit, in their actual form, the rate of net earnings (not of wages) as regards time, and amount and quality of work performed, with an accuracy far exceeding that of the generality of evidence tendered by witnesses, who are from time to time examined touching the comparative rates of wages in England and elsewhere, and those prevalent in different districts of England, yet, as they stand, they throw but an oblique ray of light on the rate of payment for work done in the same occupation in different parts of the same district.

This is what is really required in comparing the respective advantages of two countries in the production of any article. It is of no sort of consequence that the French, Belgian, or Swiss operative spinner is paid at the rate of 1s. 6d. a day, while the English spinner is paid at a rate varying from 2s. to 8s. a day, if, after all, the English spinner turns off a greater number of pounds of yarn of a given quality for 1s. 6d. than the foreign spinner. The English cotton master would still purchase the fruit of labour (which is all he wants to purchase) at a cheaper rate than the foreign cotton master, because his operative produces a greater quantity of work of a given quality in the same time than the operative of the foreign master, and for a less amount of money wages.

How far the rate of payment for work done in the cotton district differs between one mill and another, and between one district and another, I am unable satisfactorily to conjecture, because I have not had an opportunity of analyzing the Returns beyond the extent exhibited in these Tables; but differences certainly exist. The dreadful turn-out of 1829, during which almost all the Manchester operatives remained out of work for more than six months, took its origin from an attempt made by the proprietors of old and less perfect machinery to equalize the rate of payment for work done by lowering the wages of their operatives, (see Evidence of L. S. page 55, and Evidence of Redman, page 46, D. 1. First Report of Factory Commission,) and thus to put themselves in a condition to compete with the proprietors of new and more perfect machinery. The discordant views entertained among the masters themselves on the subject of the Ten Hour Bill are mainly to be explained by reference to this fact. The proprietors of old machinery are compelled to economize in every, the minutest, particular, and of course to reduce to a minimum their payments for labour, in order to make head against the crushing competition of the proprietors of new machinery. Hence, among other expedients, they are impelled to work their mills for the greatest possible number of hours, in order to diminish the charge of interest of fixed capital on each integral portion of produce, and their opposition to the Ten Hour Bill is one *pro aris et focis*. But some of the proprietors of new machinery perceive, that if they can drive the proprietors of the old out of the market they must then obtain their connexions, and such are favourable to projects for abridging the hours of labour. The proprietors of new machinery could support the effects of a law for this purpose, for they would be left in command of the markets; the proprietors of the old could not; they must change their machinery, or give up business. Consequently the proprietors of new machinery, who already obtain a greater quantity of work for the same amount of money wages than the proprietors of old, are far from being unanimous in their opposition to the Ten Hour Bill. Many of them are its most strenuous supporters. Some subscribed large sums of money for supporting the agitation respecting it. They wish, it is true, to work their mills under existing circumstances as long as their less fortunate neighbours; but they wish still more strongly for a law, which, by restricting the hours of work within certain impassable limits, should prevent their rivals from working their mills longer than their own, and thus, in effect, give them the monopoly of the market.

But my present purpose is merely to speak of the "rate of payment for work done," so far as is necessary for preventing misapprehensions regarding the results in the following Tables.

The rate of payment for work done considered to vary in different parts of the district.

I consider it certain that the rate of payment for work done, after all requisite corrections are made, is still different in different parts of the Cotton district; but after reflecting a good deal on the point, I must admit my inability to afford such proofs of this proposition as would throw a well-defined and general light on the extent to which different rates of payment for work done prevail in different parts of the Cotton district of England.

An examination which would throw light on the rate of payment for work done in different mills

mills would prove (considering the magnitude and importance of the cotton trade of Great Britain) of the utmost value; it would put the legislature in possession of certain data by which to test and estimate the probable effects of restrictive laws.

Admitting my own inability to throw a well-defined and general light on the question — “to what extent different rates of payment for labour prevail in different parts of the Cotton district of England after due and proper corrections and allowances have been made” — I cannot attribute that weight which many do to the evidence of witnesses, who represent that the rate of wages (meaning by that rate of payment for work done) is higher at Manchester than at Stockport, at Mulhausen, Ghent, Basle, or Naples.

The Tables exhibit very remarkable discrepancies in the rate of earnings of operatives in different mills and districts when mills are compared in which the same quality of work is done. They are most conspicuous in the first List.

If we compare the three mills, Nos. 39, 41, and 48, it will appear that the rate of earnings for the same number of hours' work are,

		Pence.		
For mill 39	-	127.82	or about	10s. 6d.
— 41	-	138.58	—	11s. 7d.
— 48	-	152.78	—	12s. 9d.

Thus 300 operatives, working 3,588 hours to the year, would earn at this rate about,—

In mill 39	-	£7,280	or	£27.12	a piece.
— 41	-	9,030	or	30.2	—
— 48	-	9,945	or	33.3	—

As these mills are all situated in the same town, most of the elements in cost of production must be the same; and as they spin the same quality of yarn, and consequently weave the same description of goods, though allowances for possible differences in rent should be made, it must still be clear, that however accurately the Returns fix the respective rates of net earnings for those mills, the results throw no well-defined light on the rate of payment for work done in them. This, however, is the important point as regards the question of foreign competition.

Again, mills 73 and 125 are both coarse spinning mills, and both weave. But were a foreigner travelling in England to inspect either mill 73, in which the Table shows that the rate of net earnings prevailing is 167.70 pence for sixty-nine hours' work, or mill 125, where the rate of net earnings is 79.61 pence for the same time of work, and were he to draw general conclusions from the data furnished by either concerning the rate of wages generally prevalent in Cotton-working, or concerning the general rate of payment for work done in England, he would in either case fall into the greatest error. The difference between the rate of net earnings in these two mills is more than 100 per cent.

Yet in either case, on returning to his own country, he would possess evidence regarding wages of a more precise character than that so generally tendered in examinations in England, for he would be able to say, “The money amount is clear from all deductions, and net, and the time taken to gain it is precisely ascertained to a minute.” Such evidence would be far superior to the generality of evidence tendered on this topic, which is invariably vague as to time, and, as appears to me, equally unsatisfactory in other respects.

If we inspect the General and Local Supplementary Tables, exhibiting the rate of earnings of fourteen denominations of operatives, though in them the discrepancies in question are not, from obvious causes, thrown into so bold a contrast, yet the foregoing observations will be found equally warranted.

When then I reflect that I was unable, with the utmost care, to form any general and well-defined conclusions concerning the rate of payment for work done in the cotton manufacture in England, or in any district, I cannot attribute much weight to the comparisons which are so confidently instituted respecting the comparative rate of wages in foreign and English cotton-working. In Cotton-working, the rates alleged to prevail abroad (putting out of consideration that they are never stated with reference to hours, but merely relate to periods comparatively vague, such as a day, a week, a month, or a year,) convey no information of the quantity or quality of work turned off in a given time, to realize a given sum of money. They amount, in fact, to nothing more than this, viz. that since 10d. is less than 2s. so the

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No well-defined light can be thrown on the point.

Discrepancies exhibited by the Tables.

Evidence tendered to prove the rate of wages higher in England than on the Continent, unsatisfactory.

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rate of wages in France, Belgium, Switzerland, and Germany is lower than in England; and then, by confounding the "rate of wages" with the "payment for work done," it is asserted or implied that the rate of payment for work done is likewise lower abroad than at home.

This consequence would not be true, even if the generality of the evidence as to wages or net earnings approached to accuracy, (which no one can suppose very probable,) still less is it true when no distinction is ever made in this kind of evidence between rate of wages and rate of payment for work done.

A variety of evidence, supported by documents and letters, was tendered in Manchester, to prove that the rate of wages in cotton-working was nowhere so high as in England. I found myself incapable of attaching much weight to it, even as far as regarded the rate of wages or that of the daily earnings of an individual, and none whatever as regards the rate of payment for work done. I allude to the evidence furnished by Messrs. Pooley, Birley, H. Hoole, Ashworth and Robert Hyde Greg, particularly to the statistical documents furnished by the latter gentleman.

Mr. Edmund Ashworth was the most precise in his evidence. He deposed to having examined personally twelve mills in France and Switzerland, and to having found, that, in comparison with the wages paid at his own mill near Bolton, the wages of the operative spinners in those countries, taking into view quantity, quality, and time of work, were generally fifty per cent. lower than he himself paid at his own mill at Bolton in money; that the wages of women and children were generally from twenty to thirty per cent. lower; that his evidence on this topic referred to all qualities of yarns; and that the cost of production in cotton-working by power in those countries was, as far as related to money wages, from thirty to fifty per cent. lower than in England. (See D. 1. p. 69, First Report of Factory Commission.)

In this evidence the rate of payment for work done is distinctly asserted to be from thirty to fifty per cent. lower than in England. I am certain that Mr. Ashworth was scrupulously exact in his reports of what he had seen. I am satisfied that he stated what he had learnt on the continent without any exaggeration in point of fact; and, as to any intention of exaggeration, even the suspicion of such a circumstance is entirely out of the question; but, admitting all that he stated, I do not see that he proved what he sought to establish, viz. that the rate of payment for work done is higher in England than on the continent.

I had an opportunity of testing, in some measure, the justness of his opinions by the examination of an operative of remarkable intelligence, named Edwin Rose, who had been at Mulhausen for several years, which was one of the places that Mr. Ashworth had visited. (See D. 1, page 121, and page 69, First Report of the Factory Commission.)

Edwin Rose states, that the rate of wages or earnings at Mulhausen of an operative spinner was from thirty to thirty-five sous a day, and that the children gain from seven to eight sous a day; that they can only spin coarse works (yarn of no greater fineness than of forty hanks to the pound) at Mulhausen; that at the largest factory there, that of Messrs. Maeg's, there were no mules (spinning-machines) carrying more than 200 spindles; and that one adult and two children were employed on each separate mule.

Thus it appears that one adult and two children are requisite for the management of 200 *coarse* threads in the best mill at Mulhausen, and that they gain among them about 2s. a day at *coarse* work.

One adult and two children in England, at Manchester, Oldham, Stockport, Bolton, and a variety of other places, will gain among them at *coarse* work about 5s. 6d. a day.

Thus the rate of wages in England appears to be as eleven fourths compared with the rate of wages at Mulhausen, but the average number of threads which a spinner and two children are *capable* of managing in England cannot be less than 758 on the best machinery, for I saw this *actually* done at Mr. Ashworth's own factory; therefore the quantity of work which can be turned off in England by a spinner and two children is to that which can be turned off by a spinner and two children in France, in equal times, as 758 : 200.

From a comparison of these elements it will appear that the French operative receives 4 where the English operative receives 2.90 (which I will call 3) for an equal quantity of work of the same quality.

But

Comparison between a mill at Mulhausen and some English mills, as to rate of payment for work done.

But this examination, though conclusive, is not stated with all the strength of which it admits.

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I have taken the number of threads which a spinner and two children are *capable* of watching during the progress of coarse spinning as ≈ 758 on the best machinery; but I have no doubt (though I have not seen it done) that the three together are capable of managing *at the rate* of 800 threads on the best machinery in *coarse* work.

Again, Edwin Rose could not be certain that the motion of machinery was as rapid in France as in England, consequently it is not clear that *equal* numbers of threads are spun per spindle in *equal* times in the two countries. Again, the length of a thread spun in Manchester by one effort of the machine is fifty-four inches, but the vast inferiority of the machinery at Mulhausen, which is indicated by the facts stated by Rose, would lead to the supposition that it is not sufficiently *steady* to spin a thread so long as fifty-four inches.

Thus there is no evidence to show that a French spindle turns off as much thread in equal times as an English spindle.

No evidence to prove that a French spindle turns off as much work as an English one in equal times.

But without at present requiring any allowance for these two last considerations, we see that it requires four men and eight children to spin 800 threads at Mulhausen, for doing which they receive 8s. per day among them, while one man and two children are capable of spinning the same number of threads of the same quality in England, for which they receive 5s. 6d.

But in order to obviate all cavil, I will take the daily earnings of a man and two children spinning the average of coarse counts under forty hanks to the pound on the best English machinery at 6s. a day. The comparison will then stand thus, viz. the rate of pay for work turned off in spinning the average of coarse counts under No. 40 on the best machinery at Mulhausen is to the rate of pay for spinning the same quality of work on the best machinery in England as 8s. are to 6s. The rate of payment for work done is still twenty-five per cent. lower in England than at Mulhausen (which Mr. Ashworth told me was called the Manchester of France), after I have added one eleventh to the amount earned, and abandoned two elements of great importance in this calculation, viz. the steadiness of the machine and the rapidity of its motion, determining, respectively, the *length* of the thread that it can spin by one energy, and the *number* of threads which it can spin in any given time.

Rate of payment for work done at Bolton 25 per cent. less than at Mulhausen on one ground only.

Edwin Rose, the witness as to the facts at Mulhausen, is an operative machine-maker, now in the employ of Messrs. Sharpe and Roberts of Manchester, one whom those gentlemen pointed out to me as a person of good sense, good character, and on whose veracity I could depend. He deposed to facts which fell under his own observation at Mulhausen, and the nature of which he thoroughly understood.

I myself saw a great number of mules (spinning-machines) in Mr. Ashworth's own factory at Egerton, at which an adult and three juvenile assistants managed 1,024 threads among them. This gives an average of 256 a head, and they were spinning yarn of the fineness of from seventy to eighty hanks to the pound at the time of my visit.*

As to the evidence of the average earnings of an operative spinner spinning coarse numbers, (under forties, which is the quality taken by Edwin Rose at Mulhausen,) I am satisfied, from repeated examinations of numerous operatives in different factories at different places, taken while they were at their work, that they never exceed 24s. a week, which would be 4s. a day at the highest; and adding the earnings of two juvenile assistants, one at 6s. and the other at 3s., which all who understand the matter will admit to be high, the earnings of the whole three taken together cannot be made to exceed 5s. 6d. a day for work of the quality of No. 40.

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* It is necessary to point out here that I do not assert that the number of threads *actually* managed, upon the average, by an operative in the spinning department, is 266 (or 800 threads for three operatives), but that one person is *capable* of managing this number on machinery of the first class, and as the evidence of Edwin Rose regards machinery of the first class at Mulhausen, the comparison is fairly made between machinery of the first class in France and in England.

The number of threads which a spinning operative manages on the best machinery at Mulhausen is $66\frac{2}{3}$, spinning coarse threads under No. 40; the number which a spinning operative manages

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These considerations certainly show that the rate of payment for work done is lower at Bolton than at Mulhausen, and they exhibit the nature of that evidence so often adduced to prove that the rate of payment for work done abroad is generally lower than that prevalent in England.

But the opinion that wages are so much higher in England than elsewhere, and consequently that our manufacturers labour under such peculiar disadvantages compared with foreign manufacturers, is most deeply rooted.

And as it may be supposed by some, and will be asserted by others (unless the principles on which the following Tables have been constructed are thoroughly understood), that the results displayed in them are confirmatory of such opinions, it is necessary to show that they afford no evidence which legitimately supports them, and likewise that they sufficiently prove that no elements exist any where on which a correct comparison between the rate of wages in foreign and domestic cotton-working can be founded.

Difficult to compare rates of payment for work between any two mills.

I venture to say, not only that no evidence exists to justify the assertion that the rate of payment for work done in the cotton manufacture is lower abroad than in England, but likewise that no means exist for comparing in general the rates between any two places in England itself, and that it is exceedingly difficult to compare the rates of payment for work done in any two mills.

In order to avoid the appearance of confusion between conclusions strictly referable to the rate of payment for work done, and others referable to "interest on fixed capital or rent," I will select a particular mill (that of Mr. Ashworth) to illustrate my position.

Mr. Ashworth's mill at Egerton;

The machinery in Mr. Ashworth's Egerton Mill is of the newest and most beautiful construction. He told me that were he to fit it up again to-morrow he could not improve or economize upon it in any respect. All the mules carry the same number of spindles, viz. 512, and each spinner spins upon two at the same time, having three juvenile assistants; consequently four persons manage 1,024 threads. So steady is the action, and so well is the friction managed, that an operative can spin as many threads in a given time on these large and heavy machines as he could on lighter ones of an older construction. I timed the action of several of them (the moving power working at its average speed) with a time-piece, as I did in most of the mills which I visited, and I could not perceive that they consumed a greater number of seconds to produce one crop of 512 threads, (technically called "the stretch,") than smaller machinery. I examined several spinners in the mill of different degrees of skill on this point, and they did not represent that any time was lost in consequence of the magnitude of the machinery. On the day that I visited the mill they were spinning twist of the fineness of from No. 70 to No. 80, and the different spinners variously spun from 1,400 to 1,600 double sets or "stretches" of threads a day of that quality, of 1,024 threads the "stretch," according to their different degrees of skill and

manages on the best machinery at Bolton is 256, spinning threads of *double* the fineness, viz. from Nos. 70 to 80.

It is impossible to say what is the average number of threads *actually* managed by a spinning operative in general; but from Returns made to me at Bolton it appears that in that town and neighbourhood there are seventeen mills, containing 580,216 mule-spindles, and employing 792 mule-spinners, and that the proportion of piecers to spinners is as 3.12 : 1; consequently at Bolton four spinning operatives actually manage 732 threads among them, which is 183 a-piece. Some of the machinery there was very bad (for English machinery); some was very good. In three of the mills which I visited (containing 183,406 spindles out of the whole number of 580,216) they were spinning yarn of the fineness of from sixty to eighty hanks to the pound, which circumstance alone would prevent any general conclusion from these premises. All that I am anxious to show is, "that an English operative spinner and two juvenile assistants are *capable* among them of managing *at the rate of* 800 coarse threads of fifty-four inches in length on the best machinery." I prove them to be capable of managing *at the rate of* 758 fine threads of fifty-nine inches long $\frac{1}{2}$ on the best machinery; and the finer and longer the thread, the oftener it breaks during spinning, and the greater, consequently, is the number of piecers requisite for assisting the spinner. Hence I can scarcely doubt but that a spinner and *three* assistants can manage a pair of mules of 536 spindles each mule (= 1,072 the pair) for coarse work. This would show that a spinner and two assistants are capable of managing 804 coarse threads among them.

capacity

capacity. The length of each "stretch" of thread spun by one effort of the machine was fifty-nine inches.

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Under these circumstances the spinners were receiving from 46s. to 53s. a week, according to their skill, of which each had to pay 16s. among his three assistants, leaving his own net earnings varying, according to his skill, from 30s. to 37s. a week.

In the first place, the length of each thread given by one effort of Mr. Ashworth's machines is fifty-nine inches; this is five inches more than that given by machines in general use. Each spindle therefore gives five inches greater length, and works (let it be supposed) 1,500 times in the day; therefore it gives (in round numbers) 200 yards of twist per day more than is given by an ordinary spindle. Each pair of mules, consisting of 1,024 such spindles, gives (in round numbers) 200,000 yards of twist more per day than is given by mules of the average perfection; and this immense advantage arises but from one element, among several others, of superiority in Mr. Ashworth's machinery. The advantage of this is of course divided between the master and his operative. He pays his operative at a lower rate for work done than if the spindle produced 200 yards less per day than it does, and his operative still earns a greater sum of money at the end of the week than if he were working with machinery which would only yield a thread fifty-four inches long.

How, under these circumstances, would it be possible for Mr. Ashworth to know whether he was paying a higher or a lower rate of wages, or carrying on his business at a higher or lower cost, in this particular, for work done, than any given mill-owner at Manchester, Stockport, Oldham, Bury, or any other place in the neighbourhood, unless he knew regarding such mill all the particulars that I have detailed regarding his own and sundry others besides? Nay, what is still stronger, Mr. Ashworth would have great difficulty in accurately fixing what rate of wages any spinner in his mill was really receiving, unless he made a minute investigation.

difficult to ascertain the rate of payment for work done by any one spinner in it.

For, taking round numbers for facility, let us suppose that it cost Mr. Ashworth £30,000 to build his factory, and fill it with machinery; let us suppose that it contains 30,000 spindles, and that he employs thirty spinners, each having 1,000 spindles to watch; we may then consider him as dividing his factory into thirty shops of the value of £1,000 each, and entitled to expect the same return from each. Let us suppose the return that he expects from each is £250 per annum, composed of

5 per cent. for interest.

5 ditto wear and tear.

15 ditto profit.

25 per cent.*

But if we suppose this to be the maximum amount which each shop of 1,000 spindles is capable of yielding, it would only be yielded by those worked by the most skilful operatives.

We have seen that the skill of the operatives in his employ varies as 7 : 8, consequently the shops worked by the least skilful operative would only yield seven eighths of £250, or £218 15s.

Now, by the supposition, each of the thirty shops is of precisely equal value, as far as fixed capital, excellence of machinery, and cost of working is concerned.

Thus we perceive that the cost of production of a given pound of twist would be greater or less according as it came from the shop having the most or the least skilled operative attached to it; and as all the other ingredients in cost of production, except wages, (or rate of payment for work done, if these two things are to be confounded,) are invariable according to the supposition, this difference in the cost of producing a pound of yarn evidently arises solely from that different rate of payment for quantity of work done, to which he is forced to submit, in consequence of the different degrees of strength and skill which his operatives possess. But his profit would be greatest from the twist spun by the operative who netted 37s. a week, and least from that produced by the one who was only capable

The profit of the owner of the mill would be the greatest from the work done by the operative who earned most money in a given time.

* These figures and proportions are entirely supposititious. I know how many spindles Mr. Ashworth possesses, and his own kindness led him to tell me the actual cost, &c. of building and setting to work his factory.

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of earning 30s. a week, *and he would be paying for the work done by the former at a lower rate than for that done by the latter, though the earnings of the former would be greater.*

For, as the skill of the operative varies as seven to eight, the spindles of one shop would yield 800 pounds weight of yarn during the same number of hours consumed by those of the other in yielding only 700. Hence it is clear that the cost of production of every pound of yarn coming from the latter shop would be higher than that of the pound of yarn coming from the former, and equally clear that this is owing solely to the higher payment for work done in the one case than in the other, and not to any other cause. Now, if in our conception we unite the spinner with the spinning-machine, and consider them together as forming one machine, we have thirty systems of spinning-machines built at the same cost, carried on at the same charges of merchandize, the productive powers of which vary from seven to eight in consequence of the variation in the action of the intelligent portion.

Now, though the intelligent agents, the spinners, differ in degrees of skill, yet these differences are as nothing compared with the variations in the productive power of the rest of the machine, of which I am now considering the spinner to form a part.

These variations admitting of measurement, the mill-owners have adopted scales of payment for work done, varying with (though not *as*) the degree of productive power of the machine on which it is done. These scales are printed, and I have given specimens of two of them; but every mill-owner, as far as my experience extends, re-adjusts the public and printed scale according to the actual status of improvement temporarily existing in his own mill. One house, for instance, pays 2s. 5d. a pound for yarn of the fineness of 200, spun on machines of the magnitude of 648 spindles; another pays 2s. 8½d. a pound for the same quality spun on machines of the same magnitude. The two mills in which these two discrepant rates prevail are in the same town; the operatives of both mingle together every evening after work is done; the weekly net earnings obtained in one mill are several shillings a week greater than those in the other; the fact is notorious among all the parties interested, but is submitted to, and allowed to be equitable, because one mill is, in certain respects, under disadvantages as compared with the other.

Hence we perceive that the rate of payment for work done is regulated by two scales. That which is referable to the productiveness of the machine admits of measurement, is exhibited on paper, and re-adjusted in each mill respectively; while the other, which does not admit of exhibition on paper, is practically measured by the comparative skill of each operative, and exhibits itself in the quantity of work which he is able to turn off from a machine of given productiveness in a given time.

Now, if we consider the spinner and his machine as making one system, these two scales would be amalgamated into one, according to which the master would estimate his rate of payment for work done, and we should then be able to obtain something that resembles accuracy in comparing what is commonly called the rate of wages in two mills, two places, and two countries.

The varying skill of the operative, infused into a machine of given productiveness, would immediately affect that productiveness with its own variations. The spinner whose skill is represented by seven, when attached to a system of 1,000 spindles, would give a productive machine the efficiency of which would be represented by 7,000, while the spinner whose skill is represented by eight, attached to a similar system of 1,000 spindles, would give a machine the productive power of which would be represented by 8,000. Every element in the cost of setting to work the two systems would be the same, yet one would only yield 7,000 threads, while the other would yield 8,000; therefore each thread which the latter produced would be given at a less comparative cost of production than the other. This less comparative cost of production evidently arises from the difference in the skill of the intelligent agent, and consequently attaches to that part of the cost of production which is commonly denominated wages of labour, and more correctly "rate of payment for work done." If we now retrace our steps, disengage the spinner once more from the machine, and then proceed to regulate his remuneration by the productiveness of the machine on which he works, (and this is the principle adopted in the cotton trade,) it is clear that the "rate of payment for work done" will be highest where the skill of the spinner does not enable

enable him to produce more than 7,000 threads in a given time, and lowest where he produces 8,000 in the same time.

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From these considerations, it appears to me to be clear that the rate of payment for work done can never be known, either particularly or generally, unless the productiveness of the machine, or of machinery in general, is known. This may be arrived at with accuracy in particular instances, and the acquisition of proper data would enable us to throw a certain general light upon the general question, but of what nature I am unable to say. At present it seems to me, from the foregoing analysis, that in occupations dependent on machinery of such a kind as is used in cotton-spinning it is impossible to make any such comparison.

Rate of payment can never be known unless the productiveness of machinery is known. It therefore seems impossible to compare the rates of wages in any two countries.

It seems somewhat unaccountable that gentlemen who are in the habit of paying their own operatives according to a scale dependent on the varieties of productive capability in the machine, and according to the extent to which the operative develops such capability, should think it a simple and easy matter to compare the rate of wages in foreign and English cotton-working.

It seems to me that Mr. Robert Hyde Greg, who delivered in to the Factory Commission at Manchester a number of documents relative to the rate of wages in different countries in cotton-working (see his evidence, pp. 30 to 39, D. 2.), would nevertheless have found himself at a loss to form any idea in general of the rate of payment for work done in those countries, and that if he were told that it was variously from 500 to 1,000 per cent. higher on the continent than at home, those documents would have lent him but little assistance in refuting the assertion. What should be produced on these occasions are scales similar to the one which I have quoted, and evidence as to the quantity of work done by men of average skill and strength in given times under the same set of circumstances. Such elements of comparison do not exist. When Mr. Greg states that the rate of wages of a spinner in Alsace are from two to two and a half francs a day, and those of a piecer from eight to twelve sous,—that in Switzerland a spinner's wages are from 6s. to 12s. English a week, and those of a piecer from 2s. to 3s., and so on, of the rate of wages of cotton-workers in the Russian dominions, in Baden, and at Naples,—how does this evidence avail him to prove that the rate of payment in those countries for work done is lower than in England, even though every English operative cotton-worker were earning £5 a day?

Evidence of Mr. Greg on the point.

He produces the following Table of the comparative cost of production of a pound of yarn of the fineness of forty hanks to the pound in Switzerland and England:—

PROCESSES.					Manchester.	Switzerland.
					Pence.	Pence.
Preparations, &c.	-	-	-	-	71.3	.664
Spinning	-	-	-	-	1.855	1.236
Reeling, &c.	-	-	-	-	.755	.513
Contingent expences	-	-	-	-	1.071	1.041
Interest of capital	-	-	-	-	.812	1.012
					5.206	4.666

The wages of labour are contained in the three first of these items, and partly in the fourth; and by their agency we are told that the Swiss producer can offer cotton yarn of the fineness of forty hanks to the pound in the market of the world at a prime cost of 4½d. (say) the pound, while the prime cost of the English producer is 5½d. (say); and his evidence proceeds:—"Thus the only advantage in England is the lower rate of fixed capital, arising from more work being done by the same machinery. This is the *sole* item of cheaper production, &c."

But he states nothing to disprove the fact which I have shown to exist, that, besides the advantage arising from superior machinery in a saving of interest of capital, another source of cheaper production arises from superiority of machinery, which is "*a lower rate of payment for work done.*"

Does not disprove that superior machinery produces a lower rate of payment for work done.

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It is singular that this fact should not force itself upon the attention of men who print such "scales" (I possess a dozen of them) as that which I have quoted, and regulate their daily transactions in payment of wages by means of them, and who furthermore separately re-adjust these general scales (from time to time publicly agreed upon between themselves and their operatives, and printed,) with reference to the actual state of the machinery in their respective mills, though still without deviating from the principle of the printed scale.

An English cotton-mill owner, knowing that the wages of an English spinner vary from 10s. a week to 50s. according to the quality of yarn that he spins, and to other circumstances, visits a cotton mill at Salerno in Naples, and finds that a spinner's wages there are 6s. a week.

It is apparent, on the face of this statement, that "wages" are higher in England than at Naples. But is the rate of payment for work done higher? This is the conclusion which Mr. Greg's testimony as to the facts which fell under his observation at Salerno might be taken to establish, and on this is founded a new conclusion, viz. that the cost of production is higher, *cæteris paribus*, in England than at Naples; and on this ground the legislature is invited to make or abstain from making certain laws.

As this ground was taken up in general by Messrs. Birly, Hoole, Ashworth, and various others, in their evidence on the factory question, it is desirable that the soundness of it should be appreciated at its just value.

Defects in the evidence as to rate of payment for work done at Naples.

The first defect, as it appears to me, in Mr. Greg's statement regarding the rate of wages at Salerno, is, that he does not say whether they pay there according to quantity turned off, or according to fixed weekly wages. The second is in not stating whether, supposing them to pay in proportion to quantity turned off, the rate of such payment at Naples varies with the productiveness of the machine employed. The third is in not giving an accurate measure of the efficiency of machinery, which, as a cotton master, it was easy for him to appreciate.

The mill at Salerno possessed, Mr. Greg says, "about 7,200 spindles, and the machinery was good, and on the newest principle, including Mr. Dyer's patent roving-frame." Are we to conclude from these expressions that the machinery was as good as Mr. Ashworth's? If so, the spinning department would have employed seven male adults and twenty-eight juvenile assistants: total, thirty-five persons. If, on the other hand, it was as good as the best machinery at Mulhausen, it would have required thirty-six adults and seventy-two non-adults: total, 108 persons. How great the difference, and how impossible is it to compare the rate of "payment for work done" between Bolton, Mulhausen, and Salerno from such data.

By neglecting to state how many adults and how many juvenile hands were really employed in the spinning department of this mill to manage 7,200 spindles, Mr. Greg has omitted to furnish the third element, which is essential to the justice of his conclusion, viz. that in consequence of the lower rate of wages abroad, the cost of production is, *cæteris paribus*, higher in England.

Points to be attended to in judging of spinning machinery.

No light whatever is thrown upon the comparative goodness of spinning machinery in two countries by such expressions as "that it is good, and on the newest principle." On the contrary, they may lead to erroneous inferences. In judging of the comparative excellence of the spinning-machine called a mule (which is a *System* of spindles), it is necessary to know,—

First, How many spindles it carries, or, in other words, how large the *System* is.

Secondly, The length of the thread which it is capable of spinning at one effort.

Thirdly, The time required for the performance of this effort.

Fourthly, The extent to which it is suited to spin yarn of different qualities.

Fifthly, The number of intelligent agents of several degrees of strength and skill which it requires to guide and watch it.

The witness whose evidence throws light on this topic is Edwin Rose, where he says that he saw no mules at Mulhausen carrying a greater number of spindles than 200, or capable of spinning yarn finer than of forty hanks to the pound, and that each of these required one adult and two juvenile assistants. Notwithstanding that this machinery is immeasurably inferior to that in England, it might still have been both "good and on the newest principle." Nevertheless the rate of payment for labour which it compels the master manufacturers

manufacturers to pay at Mulhausen is twenty-five per cent. greater than that paid by the master manufacturers in England, even when we only take into consideration the *fifth* ingredient of those which I have just mentioned as determining the quality of a machine. Lancashire District.

Were I to attempt estimating the extent to which the other four ingredients serve, first, to reduce the rate of payment for labour in England, and, secondly, the charge of "interest on sunk capital," the triumphant and apparently unassailable superiority of England over what are called her Continental rivals would be very apparent, though the other elements in cost of production, besides rate of payment for labour and interest on capital, were neglected. Immense superiority of England over other countries.

Mr. Edmund Ashworth and Mr. Pooley, who has visited Ghent, estimated in their evidence the advantage on the whole cost of production possessed by the Ghent manufacturer over the English one as varying from 5 to $7\frac{1}{2}$ per cent. Mr. H. Hoole estimated his advantage at 20 per cent., and Mr. Birley at 40 per cent. If the lowest of these estimates were correct, the wonder is that the English spinners should not have been totally ruined long ago. Ghent.

Since this evidence was delivered in June 1833 a deputation of the Ghent manufacturers, though thus alleged to possess an advantage in offering their yarns in the market of the world varying from 5 to 40 per cent. in prime cost over English yarns, have represented to his Belgian Majesty that they are ground to dust by the pressure of English competition; they have demanded the most absolute exclusion of English yarns and manufactured goods, and in addition they have declared that a compliance with these demands will not save them from ruin, and that they shall be unable to continue the business unless they are protected by a bounty on the article which they produce. What opposite views are entertained on the same point at Ghent and at Manchester by persons who are apparently equally entitled to challenge attention to their opinions! Messrs. Poleman and Turranke are practical authorities at Ghent; and no persons are more justly entitled to that character at Manchester than Messrs. Birley and Hoole.

The various Supplementary Tables relative to the 151 mills which returned the number of hours which they worked during the month ending 4th May 1833, will certainly suggest to those acquainted with the subject considerations of a nature to re-establish confidence, supposing it to have been shaken by the fear of foreign competition springing from the belief that the rate of payment for work done is lower on the continent than in England, and they will afford those who follow up the subject in general the means of appreciating the title to accuracy of much of the evidence which has been advanced regarding the rate of wages at home and abroad. I shall conclude this topic by an extract from the evidence of Edwin Rose.

"Evidence of EDWIN ROSE, Operative Engineer (D. 1, page 122, First Report,
Factory Commission.)"

Returning to the point of wages, are they lower in France, as far as you have seen, than in England?—If I have a shop of men in England for any thing, then I have to see how much I have got to pay them for the work they turn out of any kind; but if I have the same shop in France, then I must have twice the number of hands to do the same amount of work. It is true I pay them less a-piece there; but I have seen that you must have twice as large a building to contain the hands, twice as many clerks and book-keepers, and overlookers to look after them, and twice as many tools to do the same quantity of work as is done here in England; and the master there must have twice as much interest of money on all this; and their minds seem to me to get more bewildered with stress of work there than here. It seems to me that you have double the number of people there to do the same amount of work, whatever it be; but their wages are lower in money.

But do you consider their wages higher in reality?—I really do; they are better paid, in proportion to the work they turn out, than what the English are.

Do you judge this of the spinners and cotton-printers, as well as of other workmen, with whom you met in France and Switzerland?—Certainly, I mean it in general; but I should say that the Swiss are better workmen than the French. They are more ingenious, and lay closer to their work a deal.

Lancashire District.

Have you, as a workman, and having been in a large manufactory at Mulhausen, and being in one in Manchester, any doubt whatever that the rate of wages is really higher in France than it is in England?—I have no doubt at all; not a bit.

What do you think of French workmen as workmen?—I don't think they have that perseverance that English have. I often have noticed them trying a thing, and then if it don't answer at first they seem terrified, and shrug up their shoulders, and throw it aside; but an English workman keeps trying and trying, and won't give up near so soon as the Frenchman.

In what descriptions of work in machinery do you think they excel the English?—I am not aware of any. I don't know what machinery they excel in. In the stove-pipe manufactory and light copper vessels they are very clever, and better than us, I do consider. I think their copper covers very good, and their copper boilers for steam-engines likewise. In copper piping I have seen some excellent work done connected with high pressure engines.

Now what did these copper boilers and copper piping stand in?—They were better paid for them than they would have been paid for here in wages. The material is, I think, pretty near the same in value, but they took more time to do those things there than here, and the wages amounted to more.

What is their tin work?—There is a great deal of it. Lead is very expensive there, and they use much more tin in water-pipes and on the roofs of houses than we do.

But can they make a tin drum for throstles?—Well, I know my father-in-law at Kœchlin's had the worst job in the world to get a tin drum made for throstles. We had to have it pulled to pieces five or six times, and, after all, it was very bad; not such as we would turn out.

Is there much German tools and cutlery coming into Mulhausen?—Some; chiefly cutlery.

What is it, compared with English, in price and quality?—About one third dearer, and not to compare with ours at the same price. A Frenchman generally seems to know the superiority of our work; he will give more for it a great deal. All the files we used at Kœchlin's came from England, and had to pay 8*d.* a pound duty, I believe; their steel of all descriptions used at Kœchlin's came from England, though charged with a heavy duty. This must naturally shew the disadvantages under which they labour.

Judging from what you have seen, do you think the French manufactory can rival the English?—Oh no; that's quite entirely out of the question.

What do you think of the Swiss?—I consider they are more like a race of English people, and apply themselves steadier to work than the French do.

But can they beat and undersell us in cotton goods?—I should certainly say no.

What is the rate of wages for a collier in France?—At Ronechamp they let the work by auction. They seemed to me to average about twelve francs a week; and then their wives work there in the collieries just as the men do. I went to Ronechamp to put up pumping tackle to the engine. There were a great number of persons employed. I have seen 500 waggons standing to be laden with coals in one day. But the price came very heavy; it was twenty-five sous, or 1*s.* 0½*d.* a hundred weight at the pit's mouth. They were inferior to our coal, and weighed very heavy. A house joiner or carpenter's wages were from thirty-five to forty sous a day. His work, compared with English work, is very rough, and but little of it in comparison. A plasterer about three and a half francs a day, if he is a finisher; those that lay on the rough coating about thirty sous a day. The plasterer's work is as good as ours, and perhaps more fanciful. A stonemason's wages are from three francs to four francs. They are inferior to our masons in laying foundations. Then, as to time of work, I think two English masons in the same time do more work, upon an average, than three of theirs.

In short, do you know any single kind of labour that stands in cheaper to a master in France than in England, quality and quantity of work being considered?—I don't know any, unless it be tailors' and shoemakers' wages; but I am not sure about them. Clothes are dearer in France than in England, but shoes are cheaper, the duty being off leather. Then I think paper is cheaper, and that they excel us in that branch, as far as paper for covering rooms is concerned, in taste and colours, and the price is very low, there being no duty on paper.

Mr.

Mr. Roberts told me to-day that he used the French screws in his manufactory, and that he found them cheaper than the English, though they ranged to double the price; and that this was owing to their good shape and exact cut; what can you say about this?—I certainly say they are cheaper upon the whole. You can trust to French screws more than English; their spiral is more regular; their thread more even; they taper, which is of great consequence; thus they get tighter in the wood all the way they go. Ours are knocked off that cheap that they are little better than nails.

Lancashire District.

Was much English twist smuggled into France while you were at Mulhausen?—Yes, a great deal; particularly fine numbers. My father-in-law, who is now in business as a machine-maker at Stockport, was Mr. Kœchlin's manager; and when he was going to leave him, offered, as a favour, to make him a pair of fine mules for his brother-in-law, Mr. Beaucart; but Mr. Kœchlin said it was of no service, for so much English fine twist was smuggled into France in winter from Switzerland over the ice during the long nights that there would be no use at all in trying them. It was notorious at Mulhausen that plenty of English twist was smuggled in there. It was generally fine twist for weaving lace. I don't know whether any coarse numbers were smuggled in or not.

What should you say of French iron, best quality, as compared with ours?—It is about one third higher in price, and the castings are one half as high again, and not so good.

Is there any thing else that you wish to add to your evidence?—You asked me in what works the French and Swiss were superior to us. I think the Swiss beat us in mathematical instrument making. There is a great number of them in London, getting high wages. They come chiefly from about Berne and Neufchatel."

The Calculation of the total number of persons employed in cotton-mills in England is now placed to follow the series of Cotton Tables. In its present shape the construction of it was not finished till very lately. I have affixed a short notice to the head of it. The elements employed in it have been selected with the utmost care, and I believe that its result does not much differ from the actual fact. Part of the elements employed in distributing the number of children under thirteen years of age into the respective numbers of each age between five and thirteen years old, and of the sexes, viz. the School Returns, have not been sent to me, to prepare for publication.

Calculation of total number of Persons employed in cotton-factories.

This Calculation has been made by Mr. Stanway from Returns of the 225 cotton-mills; and he has distributed the total result into the different classes, ages, and sexes which it displays, employing the proportions and classifications to be found in the General Supplementary Tables.

The result shews that the total number is 212,800, and that their total annual earnings are £5,777,433. 14s. 1d.

Several uncertain elements are necessarily introduced into this Calculation; but the manner in which the most important of them (the deduction for waste) was treated, the particulars of which it would be difficult to describe, render it probable that the calculation approaches very nearly to the real state of facts.

Now if the proportion of the 212,800 operatives which is under the age of fourteen be taken, it will be (assuming the accuracy of the original Returns) 43,703; and taking the average rate of earnings for children of that age from Supplement C., compiled from the same Returns, at 46.35 pence, it gives an annual amount of earnings, which these children receive as their share of the whole amount, of £438,887. 7s. 6d.

Taking, again, the same number of 43,703 children, and dividing them into the numbers of each age according to proportions between children of different ages working in factories as exhibited in Tables compiled by Mr. Stanway from Returns from the masters and directors of various Sunday-schools, (which I am not aware that it is proposed to publish,) and relative to 51,530 children of all occupations, and taking, again, the average of the wages of children of each age between nine and fourteen ascertained by all the three Commissioners by personal examination of 639 children between those ages at different Sunday-schools, (and which is published in the First Report of the Factory Commission, D.1. p. 89.) we arrive at a result of £443,405. 15s. 7d. as the total amount of annual earnings of 43,703 children under fourteen years of age. This result differs from the

(D. 1.)

* T 3

other

Lancashire District.

other by no more than £4,518. 8s. 1d., a sum very insignificant indeed when compared with such an one as £443,405. 15s. 7d.

As part of the elements employed in each of these calculations are derived from sources entirely different and independent of the others, the near coincidence of the general result cannot but be considered as confirmatory of the accuracy of the whole Calculation of which the number of children forms a part.

It appears from the proportions which I have taken on which to calculate the whole number of cotton-working operatives of Great Britain, that while 42,745 males under eighteen are employed, only 40,512 females of the same age would be employed.

This discrepancy is not great, but as it relates to a period of life when marriage would hardly interfere with female occupations, it may be worth while to attempt explaining the cause of it. It merits remark, because it is so far from being the fact that the labour of males *up to the age of eighteen* "costs more money" in cotton-working than that of females up to that age, that the case is precisely the reverse, as may be seen by reference to the First Report of the Factory Commission, D. 1. p. 88. Table 4. The value of the labour of a female up to that age is greater than that of a male, for their strength and activity is as great as is requisite for the work to be performed, and they are more docile and obedient. It consequently costs more.

Female labour up to age of eighteen more valuable than male labour up to that period.

To throw what further light I can upon this point, I annex four Tables of the trades and occupations of 4,933 children and adults, who frequent the large Sunday-school at Stockport. The girls amount to 2,574, and the boys and young men to 2,359.

These four Tables, exhibiting the superior demand upon females, as domestic servants to that upon males in early life, will account in part for their obtaining higher wages in factories than males during that period, when taken in conjunction with the other fact that their labour is really more valuable.

There is an observation to be made on labour in factories which is worth some attention. It is that up to a certain age (what I cannot satisfactorily fix, but it is between nineteen and twenty-two for both sexes,) the age itself is a fair exponent of the earnings. The child begins to learn at eight or nine; he insensibly picks up his skill, and in proportion as he increases in stature he becomes better adapted, from the alteration in size, for attending on one sort of machinery than another. By the age of nineteen or twenty he has passed through all the successive stages, and acquired all the elements of future skill. Accident then determines his future destiny and earnings; but up to that period the earnings of both sexes not only keep pace with their advance in years, but either the age or the earnings, it appeared to me, might be taken as the exponent of the other.

The principle which subsequently determines the differences of earnings realisable by adult males and females in cotton-working (as far as the state of things in the Lancashire district is concerned) is, not that female labour "costs less money" than male labour, and that the master always takes it *in consequence*, but is this, viz. that adult males are fit for *every* species of occupation in factories requiring adults, while adult females are only fit for *some* occupations and not others in factories. Thus a woman can spin, and many do, but she is not so capable of managing two mules as a man is, and consequently spinning by females has been on the decrease in the Lancashire district. A change in machinery may bring them back to this occupation to-morrow. The Tables of the Stockport school will show how much more numerous are the occupations of life open to men than women. Hence there is a surplus of adult female labourers for all occupations in which males and females are equally capable of engaging. The effects which would flow from this principle are controlled by marriage, which, by confining females to their own houses, takes them out of the labour market. In early life, the draft upon them for domestic service (judging from the Stockport Tables) must have some influence upon the price of their labour in cotton factories, especially since it is, at that period, more valuable than that of boys and lads. The earnings of women in general seemed to me to be regulated by those prevalent in the power-loom weaving department for coarse goods. This is the greatest single field for the employment of adult females, and the mass of them are thrown upon it. The greatest earnings that the best female operative in this department can possibly make never mount higher than 16s. a week. The Tables shew the average for the whole district to be 129.87 pence for sixty-nine hours' work, nearly 11s., comprehending adults and non-adults.

Male

Male spinners out of employ, adult males waiting to place themselves in the spinning and preparing department, frequently take temporary occupation as weavers, where their earnings are of course regulated by those of women. Lancashire District

A master does not employ children and females, as may be supposed by some, in preference to males and adults, because their labour is (in the ordinary sense of the words) cheaper than that of males and adults, but because it is better and more valuable for the purposes for which he employs them. Machinery occupies space, and is constructed with reference to the size and stature of the operatives. It would be dearer to a spinner to pay 3s. a week to an *adult* scavenger than 5s. a week to a child of ten years old, and the same principle applies throughout. If the intervals between machines were in all cases wide enough for the passage of adults, a room would hold less machinery, and the factory holding a given quantity of machinery must be built on a larger scale, and would consequently cost more. It is difficult, even for any one who has seen the state of things in the Lancashire District, to ascertain the influence which circumstances so minute, and often so little obvious, have on the comparative value of male and female adult and non-adult labour, and impossible for any one who has not seen the district to proffer general opinions deserving of attention.

I saw enough to satisfy me that things apparently analagous when described are essentially different when beheld. No two things belonging to one general class can well be more different than a "fine" spinning and a "coarse" spinning-mill; yet the operations are similar, and the machinery employed is similar. But it would be rash to draw inferences from one and apply them to the other. As the machinery of the one would be inconvenient for the purposes of the other, there arise a different proportionate employ of operatives as to age and sex, different rates of wages, different customs, and different arrangements. I received a remarkable proof of this yesterday; I had written to one of the most experienced and practical operatives whom I had found, to request he would inform me by return of post "how many threads of the average fineness under forty hanks to a pound a spinner, with three assistants, spinning on the best machinery, could manage." This man is an operative who has worked in twenty-seven different mills (coarse and fine), yet, from having been overlooker of a "fine" spinning-mill for several years he is totally unable to answer the question.

Hence I am anxious that the observations in this preface should be understood as applying solely to what I saw myself in the Lancashire district. I would not venture to hazard any opinion concerning a different state of things, as in Scotland, Preston, Belper, or elsewhere; I should expect, *à priori*, that in Scotland females were more extensively employed in cotton-working than males, judging from what I understand to be the average quality of work done there in spinning, and the quality of the goods woven, but I should not be surprised at finding such an expectation erroneous. The counts spun in Scotland are of a higher average, I understand, than those spun in England, though they do not approach there to the finest Manchester spinning; hence I should infer that the average of their machinery was intermediate between that used for "coarse" and that used for "fine spinning." If so, the spinner need not possess the physical strength of a Lancashire *coarse* spinner, nor the steady and perfect skill of a Manchester *fine* spinner; hence I should infer that women were more in demand as spinners in Scotland than in Lancashire, and, if so, they would always prefer girls to boys as assistants, for the boys about twelve or thirteen would get beyond their control and neglect the work.

My supposition that the proportion of male to female labour in factories is lower in Scotland than in England may be quite erroneous; some difference in machinery in Scotland of which I am entirely ignorant may upset such and similar speculations. My sense of the difficulty in the way of such speculations in the cotton manufacture indisposes me towards saying any thing on the results exhibited in the Silk Tables. My investigations in the Lancashire district only lasted eight weeks, during which I could not find time to study the silk manufacture in such a manner as to justify me in hazarding any opinion regarding it. The little that I gathered respecting the cotton manufacture has served to satisfy me of the necessity of caution in judging from analogies. Silk-mills, Tables of.

Therefore, in referring to the Silk Tables, which immediately follow the Cotton Tables, I shall make but few remarks. With respect to Manchester in particular, they present but a very slight idea of the extent of the silk trade, or the numbers of the persons employed therein.

Lancashire District.

Forms were issued to the proprietors in Manchester, Macclesfield, and Congleton, and of the Returns to these there are very few which are full and complete.

Five only of the Manchester silk-mill owners made the first Return, and although some few made the second, without having previously returned the other, it is evident that the latter cannot be made available for any useful purpose.

The Silk Tables are compiled in the same manner as those for the cotton-mills, and it is therefore unnecessary to notice each Table separately, the explanations already given being equally applicable to both.

Flax-mill, return of.

I have added a Return from the only flax-mill which I saw, as showing that the same Form of Inquiry which I adopted for cotton and silk-mills is applicable to flax-mills. I have not had time to table or even examine it.

In addition to the Returns thus far referred to, nine of the Bolton mill-owners have furnished particulars relative to the spinners and piecers in their employ, which throw light upon one or two important facts relative to factory labour, and particularly on that of children. These Returns I had not time to reduce to a tabular form previous to the date of my learning that the labours of the Commission had been brought to a close long previously, and that it was not within the limits of the duty of the Central Board to permit the publication of any matter which was not in their hands before the 22d of August 1833. It would, therefore, be informal to do more than to allude to them here.

One half of the children up to the age of eighteen in the direct employ of the operatives.

But as it will be seen, on referring to Supplements (A.) and (B.) Cotton-mills, that very nearly one half of the children under eighteen are in the direct employ of the operatives, it is of considerable importance to ascertain in what proportion such children are relatives of the spinners by whom they are employed. Upon this point the Bolton Tables give every information.

Owing to circumstances which it is unnecessary to specify I was not in a condition to revise these Tables, nor to prepare the prefatory matter, until the 1st instant, and the time then placed at my disposal for both purposes did not extend beyond to-day.

Hence it has been impossible for the Tables to receive more than one revise, as far as figures are concerned, from Mr. Stanway, who resides at Manchester. That, however, has been performed with great care, and, I trust, no error has been overlooked. The headings of the columns and titles of the Supplements, which appertain to the share that I have taken in the construction of the Tables, have been carefully settled by myself; but as the Preface, with exception of the first two pages, has been composed entirely since the 1st instant, I trust that indulgence will be shown to its many defects. I cannot hope to have succeeded under such disadvantages in always making my meaning clear, or in avoiding ambiguities in expression. I cannot expect to have done justice, either to the subject itself or to my own views regarding it.

JOHN W. COWELL.

7th March 1834.

Postscript.

I HAVE read the foregoing sheets, for the first time after they were written, in correcting them for the press, and I can truly say with Dr. Johnson that I have been obliged to write a long Preface because I have not had time to write a short one.

I cannot dismiss it without a wish to express the gratitude which I feel to the cotton-masters in the Lancashire district, for the great readiness and courteousness with which they facilitated my inquiries. It is true that they had nothing as a body to apprehend from the most rigid investigation, but still the inconvenience of it to them must have been great.

By replying in the manner they did to the forms of inquiry that were issued they have rendered service to the public. At my suggestion the names in the Tables have been suppressed, and hence I hope, that in promoting future investigations, instituted for public purposes, with as much zeal as they displayed in the last, they will feel confident that they are not exposing themselves to the risk of revelations which might be individually injurious. The Tables as they stand will, I trust, be of some service to them as a body. It is they who afforded the means, and the calculations which have resulted will show them, for the first time, a definite outline of the vast dimensions of their own importance, and may perhaps lead them to suspect that the apprehensions which they entertain of foreign rivalry are not founded on a solid basis of facts.

J. W. C.

8th March 1834.

N.B.
cisely

Form, the answers to which are applicable to the preceding form.

MISSION.

STREET.

FACTORY for ENQUIRING AS TO THE
Manufacturing Districts of Great Britain,
and they further request that this Paper
should be made available; and that in case you should
receive this, for making your return, that
reasons for it.

to be made, and placed in one of the
that they may have an opportunity of

the month ending the
our return.....

state the relative
.....

the specified period...

kind period to all the
.....

under fourteen years
.....

ARS OF AGE.

D. 1.

Lancashire Dist

Flax-mill, retur

One half of the
children up to
age of eighteen
in the direct
employ of the
operatives.

(1188)

N.B.—This is a Fac-simile of the Second or Supplemental
copy to the Answers given to the first

NOTICE

Manchester, 28th June, 1888

FACTORY COM
YORK HOTEL, KING

The COMMISSIONERS appointed by His MAJESTY
EMPLOYMENT OF CHILDREN IN FACTORIES, in the
request from you immediate replies to the following Questions
may be returned at their Office, as above, with the least pos
require more than four days, including the one on which you
you will immediately advise them of the circumstance, and of the
You are also requested to cause copies of the Answers
Rooms requested by the Persons in your employment, so
inspecting them during one whole day.

1.—State the counts which you were engaged in spinning during
1st May, or during the period for which you have made
proportions.

2.—If you were spinning, during that time, both coarse and fine co
proportions.

3.—State the number of hours which your Mill was at work during

4.—State the total Amount of Net Earnings paid during the year
persons in your employ under the age of fourteen.....

5.—Fill up the annexed form showing the total number of children
of age employed by you.....

CHILDREN UNDER 14

NOTICE.

The following are the two Returns of Mill No. 54. They were of course returned on the Forms themselves, as originally issued, and of which I have given fac-similes. All the answers of the owners of the mill are printed in Italics, but this was not possible as regarded the figures, the printer having no such type.

This is a complete Return, that is to say, it consists of a reply to the First Form and likewise to the Second. It is given as a specimen.

There is a clerical error in it, which I have not rectified, for the purpose of instancing the use made of the checks. The error is in the answer to the third primary query, in which the owner states, that the total number of persons employed by him, exclusive of those in his counting-house and warehouse, is 317. The additions of the details of numbers in the Schedules show that he ought to have given this total number as 319. This produces a consequent error in the reply to the fourth primary Query, which should have been 332 instead of 330. In the tabling the Return the error has been traced to its source by Mr. Stanway, and discovered to be merely clerical.

In this Return the sum of additions of net earnings coincides with the reply to the fifth primary Query regarding wages. The owners of the mill, having, in making their replies to the Schedules, deducted whatever differences existed between wages and net earnings in their mill, have treated the residue as the sum total of wages as well as of net earnings.

It is difficult to describe the system of checks which is established in the construction of the original Form. I will only say that whether the owners of mill 54 had or had not made the distinction between wages and net earnings in their answer to the fifth primary Query, there would have been the same facility in taking out the results from their Returns with *precision* and *correctness*; and had they replied fallaciously to the Queries regarding net earnings, that is to say, had they given the *gross* amounts paid to their operatives, instead of the *net* amounts free of all deductions, the circumstance would not have escaped notice; for with regard to every *complete* Return, purporting to be *accurate*, the following system of *general* checks exists, besides particular ones. A *complete* Return gives,

- 1st. The quality of work done, and very often the quantity of each quality, in a given time.
- 2d. The number of spinners and the sex.
- 3d. The proportion of piecers to each spinner.

Now these data, in fact, reveal the size of the machinery in the mill. Consequently, if there is, with regard to a *complete* Return from any one mill, a regular difference throughout between the rate of pay to the operatives in that mill and in other *neighbouring* mills, performing the same quality of work, other than what can be accounted for by the difference of the size of the machinery, it is clear that there is something erroneous in the Return itself. Hence the existence of error is rendered manifest, and it is easy to trace it to its source. I have no doubt,—none whatever—that Mr. Stanway has been perfectly justified in every particular instance of rejecting or employing a Return in his Calculations. Supplement F. may be referred to, as illustrating the grounds of my confidence in these respects, where it will be seen that the earnings in the cleaning and spreading department appearing at Tintwhistle to be above the *average* earnings in that department for all other districts, Mr. Stanway, upon further examination of the Returns, perceived that *none but adults* are employed in that department in that place, when the cause of the discrepancy became obvious.

I have forbore from tiresome details of this kind as much as possible in my Preface; at the same time doubts might exist as to veraciousness of the results in the Tables, unless some details were afforded, and it is in point of fact upon the construction of the Forms of Inquiry themselves that the whole character of the Tables depends. I mention these details here, and a few more in the Notice affixed to the Flax Tables, merely for the purpose of furnishing others with the means of judging.

JOHN W. COWELL.

Manchester, 20th May 1833.

FACTORY COMMISSION.

YORK HOTEL, KING-STREET.

THE COMMISSIONERS appointed by HIS MAJESTY for Enquiring as to the EMPLOYMENT OF CHILDREN IN FACTORIES, IN THE MANUFACTURING DISTRICTS OF GREAT BRITAIN, request from you immediate replies to the following QUESTIONS, with reference to the Persons in your Employment. You are desired to set down nothing therein which you are not prepared, as far as your knowledge extends, to verify on Oath, if required so to do by any of HIS MAJESTY'S Commissioners.

NOTICE.

If there are any other descriptions of hands in your employ than those specified in the Schedule, you are requested to specify the same; and to state the particulars regarding them in the manner indicated in the Schedule. The return of each department is to be authenticated by the Signature of the Person or Persons employed by you to pay the hands in that department.

The COMMISSIONERS request that this Paper may be returned at their Office, as above, with the least possible delay, and in case you should require more than four days, including the one on which you receive this, for making your return, they further request that you will immediately apprise them of the circumstance, and of the reasons for it.

You are also requested to cause Copies of the Answers to be made, and placed in one of the Rooms frequented by the Persons in your Employment, so that they may have an opportunity of inspecting them during one whole day.

- 1.—State the number of persons employed in your counting-house } 1
establishment - - - - - }
- 2.—State the number of persons employed by you in your warehouse } 12
establishment - - - - - }
- 3.—State the number of persons employed by you, exclusive of those in } 317
your counting-house and warehouse - - - - - }
- 4.—State the total number of persons employed by you - - - 330
- 5.—State the total amount of wages paid by you to the whole number of }
hands, specified in your answer to question 3, during the Month } 636*l.* 17*s.* 6*d.*
ending Saturday, 4th May 1833 - - - - - }
- 6.—Fill up the returns in the annexed forms (A.), (B.), (C.), (D.), (E.), }
(F.), (G.), (H.) - - - - - }

MACHINE ROOM.

—	Total Number.	Total Net Amount of Earnings for the Month ending Saturday, 4th May.	Whether working by the Piece.	Whether in direct employ of Master or Operative.*
		£ s. d.		
Overlooker - - -	—	—	—	—
Men - - -	7	34 18 10	Day	M.
Boys - - -	1		Day	M.
Women - - -	—	—	—	—
Girls - - -	—	—	—	—
Total Number -	8	34 18 10	—	—

* In stating your replies the Letters M. and O. may be used to signify "Masters and Operatives."
(D. 1.) * Y 2

FACTORY COMMISSION:

(A.)

ROLLER COVERERS.

Total No.	Total Net Amount of Earnings for each Week in the Month ending 4th May.												Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*	
	1st Week.			2d Week.			3d Week.			4th Week.					
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.				
Overlooker -	-	-	-	-	-	-	-	-	-	-	-	-	-		
Men -	1	0	15	0	0	15	0	0	15	0	0	15	0	Day	M.
Boys -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Girls -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Women, occasional	1	0	8	7½	0	8	7½	0	8	7½	0	8	7½	Day	M.
Total Number	2	1	3	7½	1	3	7½	1	3	7½	1	3	7½	-	-
Signature of Overlooker who pays } the hands in this department - }												Paid by the Masters.			

(B.)

CLEANING AND SPREADING COTTON.

The Return to this for this Mill is included in that of the Card Room.

Total. No.	Total Net Amount of Earnings for each Week in the Month ending 4th May.				Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct employ of Master or Operative.*
	1st Week.	2d Week.	3d Week.	4th Week.		
Overlookers						
Men						
Boys						
Women						
Girls						
Total Number						
Signature of Overlooker who pays } the hands in this department - }						

(C.)

CARD ROOM.

	Whether Adults or not ; i.e. whether or not under 18.				Total No.	Total Net Amount of Earnings for each Week in the Month ending 4th May.												Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.	2d Week.	3d Week.	4th Week.										
						£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.		
Overlooker - -	—	—	—	—	—													—	—
Carders - -	2	-	-	-	2	3	2	0	3	2	0	3	2	0	3	2	0	Day	M.
Assistant - -	1	-	-	-	1	0	12	4	0	14	2	0	13	7	0	14	1	Piece	M.
Stretchers or Rovers	2	1	-	-	3	3	2	5	3	5	4	3	3	2	3	3	11	Piece	M.
Jack Frame Tenters	-	5	-	4	9	3	14	11	3	14	6	3	17	5	3	15	1	Piece	M.
Grinders - -	2	-	-	-	2	1	3	0	1	3	0	1	3	0	1	3	0	Day	M.
Strippers - -	2	-	-	-	2	1	4	5	1	3	4	1	2	9	1	3	4	Piece	M.
Bobbin Frame } Tenters - }	-	7	-	1	8	3	4	6	3	4	6	3	4	6	3	4	6	Day	M.
Drawing Tenter -	-	7	-	11	18	6	6	6½	6	6	6½	6	6	6½	6	6	6½	Day	M.
Back Tenter -	-	-	-	4	4	0	16	0	0	16	0	0	16	0	0	16	0	Day	M.
Card Tenters -	—	—	—	—	—													—	—
Feeder - -	1	-	7	-	8	2	6	9	2	6	9	2	6	9	2	6	9	Day	M.
Lap Machine, } Blowing Tenter }	1	-	1	-	2	0	12	2	0	12	2	0	12	2	0	12	2	Day	M.
Bobbin Carrier -	-	-	-	3	3	0	13	0	0	13	0	0	13	0	0	13	0	Day	M.
Blowing Room -	2	-	-	-	4	2	2	9	2	2	9	2	2	9	2	2	9	Day	M.
Scouring and jobbing	-	2	2	-	2	0	15	2	0	15	2	0	15	2	0	15	2	Day	M.
Total -	13	22	10	23	68	29	15	11½	29	19	2½	29	18	9½	29	18	3½	—	—
Signature of Overlooker who pays } the hands in this department - }										Paid by the Masters.									

* In stating your replies, the letters M. and O. may be used to signify "Masters" or "Operatives."

RETURNS TO FORMS OF INQUIRY.

11911

(D.)

SPINNING ROOMS.

	Whether Adults or not ; i. e. whether or not under 18.				Total No.	Total Net Amount of Earnings for each Week in the Month ending 4th May.												Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*		
	Male Adults.	Female Adults.	Males under18.	Females under18.		1st Week.			2d Week.			3d Week.			4th Week.						
						£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.				
Overlooker	-	1	-	-	-	1	2	1	11	2	3	0	2	3	1	2	3	0	Piece	M.	
Spinners	-	32	1	-	-	33	42	0	2½	42	8	11	43	7	4	43	6	5½	Piece	M.	
Piecers	-	-	-	-	48	19	67	14	16	2	14	16	2	14	16	2	14	16	2	Day	O.
Creel Fillers	-	-	-	1	-	-	1	0	8	0	0	8	6	0	8	3	0	7	6	Piece	M.
Scavengers	-	-	-	-	1	-	1	0	2	0	0	2	0	0	2	0	0	2	0	Day	M.
Set Weighers	-	-	-	1	-	-	1	0	12	0	0	12	0	0	12	0	0	12	0	Day	M.
Jobbing Man	-	1	-	-	-	-	1	0	12	0	0	12	0	0	12	0	0	12	0	Day	M.
Total	-	34	3	49	19	105	60	12	3½	61	2	7	62	0	10	61	19	1½	—	—	
Signature of Overlooker who pays } the hands in this department - }										Paid by the Masters.											

(E.)

THROSTLE-SPINNING.

	Whether Adults or not ; i. e. whether or not under 18.				Total No.	Total Net Amount of Earnings for each Week, in the Month ending 4th May.												Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
	Male Adults.	Female Adults.	Males under18.	Females under18.		1st Week.			2d Week.			3d Week.			4th Week.				
						£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.		
Overlooker - -	1	-	-	-	1	1	5	7	1	5	7	1	5	2	1	5	6	Piece	M.
Jobber - -	None.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Throstle-spinner - -	-	3	-	7	10	3	5	4	3	5	4	3	5	4	3	5	4	Day	M.
Bobbin-doffer - -	-	-	5	-	5	0	16	4½	0	16	4½	0	16	4½	0	16	4½	Day	M.
Total -	1	3	5	7	16	5	7	3½	5	7	3½	5	6	10½	5	7	2½	—	—
Signature of Overlooker who pays } the hands in this department - }										Paid by the Masters.									

(F.)

REELING, &c.

	Whether Adults or not; i. e. whether or not under 18.				Total No.	Total Net Amount of Earnings for each Week, in the Month ending 4th May.												Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.			2d Week.			3d Week.			4th Week.				
						£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.		
Overlooker - -	1	- -	- -	- -	1	1	8	2	1	11	6	1	10	2	1	9	6	Piece	M.
Reelers - - -	-	34	- -	9	43	15	0	0	18	0	4	17	2	5	17	16	0	Piece	M.
Winders - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Doublers - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total -	1	34	- -	9	44	16	8	2	19	11	10	18	12	7	19	5	6	-	-
Signature of Overlooker who pays } the hands in this department - }										Paid by the Masters.									

* In stating your replies, the letters M. and O. may be used to signify "Masters" or "Operatives."

(D. 1.)

* Y 3

(G.)

WEAVING.

	Whether Adults or not; i. e. whether or not under 18.				Total No.	Total Net Amount of Earnings for each Week, in the Month ending 4th May.								Whether working by Quantity of Work, or for fixed weekly Wages.	Whether in direct Employ of Master or Operative.*					
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.		2d Week.		3d Week.		4th Week.								
						£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.			
Overlookers - -	3	-	-	-	3	3	4	7	3	5	3	3	4	1	3	2	7	Piece	M.	
Reachers (to drawers-in and heald knitters) - }	-	-	-	2	2	0	2	3	0	6	0	0	2	3	0	4	6	Piece	M.	
Menders - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Doublers - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Heald-knitters - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Winders - -	-	3	-	2	5	1	11	8	1	13	8½	1	12	3	1	12	1	Piece	M.	
Warpers - -	-	1	-	-	1	0	13	6	0	12	7½	0	13	6½	0	12	3½	Piece	M.	
Weavers - -	2	29	-	17	48	23	16	0	23	11	4	23	10	0	22	15	4	Piece	M.	
Assistants - -	-	-	-	12	12															
Helpers - -	-	-	-	-	-															
Size-makers - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Reed-makers - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dressers - -	4	-	-	-	4	4	4	0	4	13	0	4	7	0	4	13	0	Piece	M.	
Twisters-in - -	1	-	-	-	1	0	11	0	0	12	6	0	12	0	0	12	0	Piece	M.	
Total - -	10	33	2	31	76	34	3	0	34	14	5	34	1	1½	33	11	9½	-	-	
Signature of Overlooker who pays } the hands in this department - }																			John Nixon.	

(H.)

OTHER MANAGERS AND OVERLOOKERS.

Are they paid according to the quantity
of work turned out in your mill, or }None.
by a fixed salary ?

Name and Signature of Answerer. A & B.

* In stating your replies the Letters M. and O. may be used to signify "Masters and Operatives."

Manchester, 20th June, 1833.

FACTORY COMMISSION,
YORK HOTEL, KING-STREET.

The COMMISSIONERS appointed by HIS MAJESTY for ENQUIRING AS TO THE EMPLOYMENT OF CHILDREN IN FACTORIES, in the Manufacturing Districts of Great Britain, request from you immediate replies to the following Questions, and they further request that this Paper may be returned at their Office, as above, with the least possible delay; and that in case you should require more than four days, including the one on which you receive this, for making your return, that you will immediately apprise them of the circumstance, and of the reasons for it.

You are also requested to cause copies of the Answers to be made, and placed in one of the Rooms frequented by the Persons in your employment, so that they may have an opportunity of inspecting them during one whole day.

- 1.—State the counts which you were engaged in spinning during the month ending the 4th May, or during the period for which you have made your return } 38s. to 46s.
- 2.—If you were spinning, during that time, both coarse and fine counts, state the relative proportions } Average 42s.
- 3.—State the number of hours which your mill was at work during the aforesaid period } 276 hours.
- 4.—State the total amount of net earnings paid during the aforesaid period to all the persons in your employ under the age of fourteen } 68l. 5s. 10d.
- 5.—Fill up the annexed form showing the total number of children under fourteen years of age employed by you }

CHILDREN UNDER FOURTEEN YEARS OF AGE.

Employments.	Males.	Females.	Total.	Whether in direct Employ of Master or Operative.*
In Machine Room - - -	—	—	—	—
Roller Covering - - -	—	—	—	—
Cleaning and Spreading Cotton -	6	—	6	M.
Carding - - - - -	—	10	10	M.
Mule Spinning - - - - -	34	14	48	O.
Throstle Spinning - - - - -	5	2	7	M.
Reeling - - - - -	—	—	—	—
Weaving, &c., Assistants - - -	1	12	13	M. & O.
If there are any other descriptions of hands in your employ, under 14 years of age, you are requested to specify the same.				
Total - - -	46	38	84	

Name and Signature of Answerer A. & B.

* In stating your replies the Letters M. and O. may be used to signify "Masters and Operatives."

TABLES EXTRACTED FROM THE RETURNS TO THE LANCASHIRE
FORMS OF INQUIRY BY MR. S. STANWAY.

COTTON MILLS.

LIST I. (Comprehending 151 Mills from which COMPLETE Returns were made.)

TABLE extracted from the RETURNS to the Tabular Forms issued at MANCHESTER on the 17th and 20th May,
and 20th June 1833.

	Town or Place in or near which the Mills are situate.	Hours during which the Mill worked in the Month ending May 4, 1833.	Counts spun.*	Average Counts spun.	Number of Persons engaged in preparing and spinning Cotton.	Number of Persons engaged in Weaving.	Number of Persons engaged as Engineers, Mechanics, Roller Coverers, &c.†	Total Number employed.	Total NET Earnings realised by the Total NUMBER of Per- sons given in the preceding Column during the Month ending 4th May 1833, and for working the Number of Hours given in the Third Column.	Average Weekly Net Earn- ings of each Individual, calculated for 69 Hours.
									£ s. d.	Pence.
1 a	Manchester -	270	14 to 40	25	931	471	100	1,692	3,470 12 0½	127.26
1 b	Duckenfield -	276	22 to 40	30	176	—	14			
2	Bolton -	274	30 to 200	100	1,255	295	26	1,576	2,877 5 6½	110.34
3	Manchester -	276	100 to 240	170	1,493	—	52	1,545	3,374 2 0	131.03
4 a	Bolton -	286	36 to 110	50	698	—	30	1,356	2,446 6 2	100.19
4 b	Ditto -	286	38 to 70	43.42	140	—	1			
4 c	Ditto -	276	46 to 68	57	213	—	1			
4 d	Ditto -	286	40 to 130	85	273	—	—			
5	Manchester -	276	130 to 230	180	1,155	—	46	1,201	2,456 10 2	122.72
6	Hyde -	276	38 to 40	39.02	475	705	3	1,183	2,520 16 3	127.85
7	Ditto -	272	12 to 40	18.96	386	762	1	1,149	2,888 3 11	153.3
8	Stockport -	267	18 to 32	25	347	566	34	947	2,447 7 11¾	160.28
9	Bolton -	272	Mule Twist 80 Water ditto 17	—	860	40	24	924	1,569 6 9	103.40
10	Oldham -	276	34 to 55	41.66	338	444	71	853	2,096 3 6	147.44
11	Manchester -	276	90 to 200	145	805	—	36	841	1,989 16 4	141.96
12	Ditto -	264	14 to 24	19	343	432	66	841	1,699 13 9½	126.77
13	Stockport -	280.5	34 to 38	36	305	542	26	873	1,995 9 4½	134.94
14	Stayley Bridge	276	28 to 38	34	308	485	3	796	1,774 17 4½	133.78
15	Manchester -	276	17 to 36	23	306	427	41	774	1,717 19 4	133.17
16	Heaton Norris -	276	36 to 40	38	267	490	4	761	1,668 17 4½	131.57
17	Manchester -	276	—	—	725	—	27	752	1,422 14 8½	113.51
18 a	Apethorn Mill -	288	37	37	134	237	1	727	1,813 12 2½	143.80
18 b	Woodley Mill -	300	20 to 38	25.83	128	226	1			
19	Manchester -	276	150 to 220	176	709	—	3	712	1,483 9 11	125.01
20	Ditto -	276	16 to 24	20	323	386	3	712	1,243 2 1	104.75
21	Hyde -	276	36 to 38	37	224	403	21	648	1,396 3 0	129.27
22 a	Stockport	287	36 to 40	38	116	252	1	632	1,354 7 1	127.28
22 b	Ditto -	276	36 to 40	38	57	54	—			
22 c	Ditto -	257	36 to 40	38	50	102	—			
23	Hyde -	296	36 to 40	38	241	358	29	628	1,512 18 3½	134.77
24	Manchester -	272	70 & below, and 170	90	594	—	5	599	957 12 10	97.33

* N.B.—This column indicates the quality of work done in each Mill during the Month ending May 4th, 1833. Mills are roughly classed in the district as “fine spinning” and “coarse spinning” mills, and each confines itself in general to its own class of work. Coarse spinning ranges from No. 1 to No. 90, at Manchester, and fine spinning from No. 90 to No. 340, which is the highest number that has ever been reached, as I have been informed, with the present machinery. These different qualities are technically called “the counts spun” or the “numbers spun.”

A hank of Cotton yarn or twist always measures 840 yards. Therefore,

No. 1 signifies that one hank of cotton yarn or twist, weighs one pound.

No. 40 — — forty hanks taken collectively weigh one pound.

No. 340 — — three hundred and forty hanks taken collectively weigh one pound.

Consequently the length of 16 ounces of cotton yarn of the fineness of No. 340 is 840 × 340, or 285,600 yards, or rather more than 162 miles. Cotton yarn and cotton twist are general terms for all spun cotton.

† The hands in this column are all, strictly, “mill hands,” and though some of them are not engaged in the actual manipulation of cotton, yet all are correctly entitled to be called “operatives.” Jobbers are included in this column, but all the persons comprehended in the answers to the 1st and 2d primary Queries of the First Form, and likewise managers, are rigidly excluded from it, and, of course, from the two preceding columns.

(D. 1.)

* Z

FACTORY COMMISSION:

	Town or Place in or near which the Mills are situate.	Hours during which the Mill worked in the Month ending May 4, 1883.	Counts spun.	Average Counts spun.	Number of Persons engaged in preparing and spinning Cotton.	Number of Persons engaged in Weaving.	Number of Persons engaged as Engineers, Mechanics, Roller Coverers, &c.	Total Number employed.	Total NET Earnings realised by the Total NUMBER of Persons given in the preceding Column during the Month ending 4th May 1883, and for working the Number of Hours given in the Third Column.	Average Weekly Net Earnings of each Individual, calculated for 69 Hours.
									£ s. d.	Pence.
25	Stayley Bridge -	315	34 to 38	35.33	243	322	20	585	1,435 13 7½	129.01
26	Houghton - -	270	12 to 40	36.78	245	331	1	577	1,310 11 8	136.28
27	Bury - -	273.5	12 to 36	24.14	217	326	14	557	1,009 1 7½	109.69
28	Manchester -	267	20 to 55	22.01	201	301	23	525	1,091 15 8½	128.98
29	Bolton - -	271	50 to 100	—	515	—	2	517	986 10 9	116.60
30	Manchester -	264	30 to 40	35	475	—	39	514	967 1 8	118.02
31	Duckenfield -	Above 18 300 Under 18 274	6 to 60	30	454	—	6	460	881 19 3	108.58
32	Stockport - -	252	20 to 40	33.64	292	153	5	450	949 3 11	138.61
33	Manchester -	264	115 to 195	155	444	—	6	450	866 5 0	120.75
34	Brinnington -	266	14 to 40	36.39	176	268	2	446	881 11 9½	123.05
35	Manchester -	265.8	12 to 36	24	238	173	33	444	967 7 3	130.72
36	Heaton Mersey -	276	20 to 40	36.25	177	259	2	438	816 4 8	111.81
37	New Mills - -	240	—	—	437	—	—	437	756 8 1	119.43
38	Cheadle Bulkeley	299.83	36 to 40	38	211	208	14	433	952 11 7	121.50
39	Stockport - -	253	36 to 38	36.8	189	213	17	419	818 4 10½	127.82
40	Manchester -	276	18 to 65	27.81	126	267	8	401	739 18 9	110.71
41	Stockport -	Above 18 288 Under 18 276	36 to 40	38	116	279	5	400	949 16 9	138.58
42	Hyde - -	270.5	18 to 40	31.81	155	240	2	397	907 13 3½	139.96
43	Manchester -	276	100 to 200	130	388	—	3	391	739 13 1	113.50
44	Brinnington -	273	19 to 38	26.5	194	190	4	388	842 7 6	131.69
45	Stockport - -	276	12 to 36	19.33	143	243	1	387	782 1 2	121.24
46	Manchester -	276	140 to 210	175	365	—	17	382	719 1 1	112.94
47 a	Warrington -	276	31 to 42	36.5	143	—	4	350	716 0 0½	112.63
47 b	Ditto - -	276	—	—	—	192	11			
	Same Owners.									
48	Stockport - -	264	40	40	123	219	7	349	850 1 5½	152.78
49	Manchester -	282	16 to 38	24	180	155	13	348	730 19 11	123.35
50	Ditto - -	276	30 to 170	43.29	344	—	2	346	726 13 7	126.01
51	Ditto - -	276	140 to 210	175	342	—	1	343	642 5 1	112.34
52	Oldham - -	207	12 to 50	31	186	153	3	342	553 7 5	129.44
53	Stockport -	Above 18 296 Under 18 276	7 to 30	18.50	310	6	3	319	516 14 5	93.57
54	Disley - -	276	38 to 46	42	233	76	10	319	636 17 6	119.78
55	Stockport - -	294.5	14 to 38	30.78	156	154	2	312	694 12 0	125.18
56	Oldham - -	276	—	50	116	188	—	304	594 8 0	117.31
57	Bolton - -	274.5	24 to 130	72.85	277	3	18	298	669 16 0	135.59
58	Stockport - -	270	40	40	112	176	1	289	536 4 7	113.80
59	Ditto -	Above 18 296 Under 18 276	36 to 38	37	140	122	22	284	659 5 8	133.82
60	Tintwistle -	273	20 to 36	28	87	184	7	278	730 17 5	159.47

	Town or Place in or near which the Mills are situate.	Hours during which the Mill worked. in the Month ending May 4, 1833.	Counts spun.	Average Counts spun.	Number of Persons engaged in preparing and spinning Cotton.	Number of Persons engaged in Weaving.	Number of Persons engaged as Engineers, Mechanics, Roller Coverers, &c.	Total Number employed.	Total NET Earnings realised by the Total NUMBER of Persons given in the preceding Column during the Month ending 4th May 1833, and for working the Number of Hours given in the Third Column.	Average Weekly Net Earnings of each Individual, calculated for 69 Hours.
									£ s. d.	Pence.
61	Hyde - -	Spinning rooms 276 Other rooms 300	36	36	107	169	—	276	656 7 11½	133.72
62	Manchester -	210	—	—	—	253	20	273	429 5 9½	124.00
63	Oldham - -	276	23 to 40	34	177	92	—	269	576 4 5	128.52
64	Stockport - -	291	14 to 20	17	99	166	—	265	541 0 1	116.17
65	Bolton - -	276	20 to 140	100	235	13	3	251	488 16 7½	116.85
66	Manchester -	273	6 to 26	16.75	250	—	1	251	424 8 6	102.57
67	Brinnington -	266	18 to 24	21	112	132	1	245	581 17 1½	147.85
68	Oldham - -	252	24 to 60	49.48	211	23	7	241	480 4 6	130.94
69	Manchester -	272.5	14 to 24	20	105	135	—	240	505 7 2	127.96
70	Ditto - -	276	130 to 210	170	208	—	3	211	522 2 2	148.46
71	Bolton - -	276	60 to 150	110	209	—	1	210	425 9 6	121.56
72	Duckenfield -	Above 18 296 Under 18 276	36 to 54	45	204	—	5	209	504 18 3	137.92
73	Levenshulme -	276	18 to 24	21	68	136	—	204	570 3 11½	167.70
74	Manchester -	270	17 to 20	18.5	79	119	5	203	434 7 4	131.23
75	Oldham - -	274	30, 40 & 55	41.66	149	51	3	203	399 7 3	118.89
76	Duckenfield -	296	40 to 140	90.20	196	—	6	202	468 17 9	129.86
77	Manchester -	Above 18 288 Under 18 276	18 to 40	32.16	180	10	8	198	317 14 0	93.84
78	Ditto - -	270.5	13 to 40	22	180	—	16	196	382 5 5	119.40
79	Glossop - -	272	34 to 40	38	64	126	1	191	424 10 1½	133.35
80	Manchester -	276	150 to 210	180	186	—	3	189	407 19 3	129.49
81	Stayley Bridge	Above 21 299 Under 21 276	8 to 40	30.75	185	—	2	187	381 0 8	—
82	Bolton - -	276	60 to 100	80	185	—	1	186	419 16 8½	135.43
83	Oldham - -	252	38	38	82	104	—	186	333 15 9	117.92
84	Manchester -	276	150 to 210	180	181	—	1	182	339 3 1	111.80
85	Duckenfield -	280	35 to 40	39	121	60	1	182	403 0 1½	130.96
86	Manchester -	272.8	14 to 22	18	76	105	—	181	406 9 4½	136.32
87	Duckenfield -	276	36 to 40	38	76	94	3	173	417 9 1	144.78
88	Oldham - -	252	24 to 30	27	166	2	4	172	290 10 0	110.98
89	Stockport -	Above 18 288.5 Under 18 270.5	—	—	—	155	—	155	348 13 1	131.71
90	Bolton - -	276	90 to 120	105	150	—	1	151	291 0 0	115.62
91	Warrington -	276	50 to 80	65	144	—	5	149	230 4 0	92.69
92	Stockport -	Spinners 267 Weavers 264	36 to 60	43	43	102	1	146	359 16 7	154.06
93	Oldham - -	255	12 to 40	27.5	142	—	4	146	260 18 11	116.06
94	Warrington -	299	30	30	61	81	3	145	287 13 1	109.87
95	Glossop - -	288	40	40	144	—	—	144	232 13 8	92.91

FACTORY COMMISSION:

	Town or Place in or near which the Mills are situate.	Hours during which the Mill worked in the Month ending May 4, 1833.	Counts spun.	Average Counts spun.	Number of Persons engaged in preparing and spinning Cotton.	Number of Persons engaged in Weaving.	Number of Persons engaged as Engineers, Mechanics, Roller Coverers, &c.	Total Number employed.	Total NET Earnings realised by the Total NUMBER of Persons given in the preceding Column during the Month ending 4th May 1833, and for working the Number of Hours given in the Third Column.	Average Weekly Net Earnings of each Individual, calculated for 69 Hours.
									£ s. d.	Pence.
96	Manchester -	276	28 to 36	30.75	139	—	5	144	193 18 9	80.80
97	Ditto -	276	150 to 210	180	143	—	—	143	348 11 0	146.24
98	Tintwistle -	308	38 to 46	42	126	—	8	134	303 11 5	121.80
99	Manchester -	276	22 to 30	26	128	—	5	133	211 12 4½	95.46
100	Ditto -	276	40	40	46	86	—	132	292 18 7	133.14
101	Oldham -	248	20 to 50	35	82	48	—	130	240 16 4	123.69
102	Manchester -	277	—	—	—	122	2	124	224 0 2½	108.39
103	Ditto -	276	30	30	42	75	4	121	252 6 11	125.13
104	Stayley Bridge -	276	40	40	114	—	1	115	263 7 6½	137.41
105	Duckenfield -	286	40	40	110	—	3	113	236 18 4	121.39
106	Manchester -	279	155 to 175	165	109	—	3	112	231 18 10	122.91
107	Oldham -	252	20 to 40	30	104	—	2	106	241 2 4	151.90
108	Werneth -	262	36	36	31	74	—	105	251 4 11½	151.24
109	Manchester -	276	17 to 20	18.5	42	60	3	105	186 5 8	106.44
110	Stayley Bridge -	296	40	40	104	—	—	104	244 6 8	131.43
111	Oldham -	276	14 to 32	26	49	48	2	99	180 18 3	109.64
112	Glossop -	282	34 to 38	36	98	—	—	98	196 14 9	117.88
113	Oldham -	276	20 to 50	36	95	2	—	97	167 14 1½	103.73
114	Ditto -	276	20 to 80	50	94	—	1	95	201 14 2	127.39
115	Ditto -	252	38	38	10	80	—	90	170 8 6½	124.43
116	Ditto -	276	20 to 26	23	90	—	—	90	128 16 9	85.89
117	Ditto -	252	7 to 30	16	88	—	—	88	146 12 9½	109.50
118	Glossop -	288	38, 40, & 42	40	87	—	—	87	187 9 8	123.91
119	Ditto -	296	38 to 42	40	86	—	1	87	168 17 9½	108.60
120	Manchester -	276	124 to 150	137	87	—	—	87	134 3 0½	92.51
121	Glossop -	276	32, 40, & 50	40.66	84	—	2	86	175 10 8½	122.46
122	Tintwistle -	295.58	46	46	84	—	2	86	173 4 5	112.84
123	Stayley Bridge -	288	40	40	82	—	—	82	180 19 1½	126.89
124	Manchester -	276	28 to 34	30.25	76	—	1	77	121 2 9½	94.39
125	Mellor -	276	36, 38, & 60	44.66	39	37	—	76	100 16 11	79.61
126	Levenshulme -	276	20	20	22	50	3	75	166 14 7½	133.38
127	Oldham -	276	20 to 30	23.33	48	26	—	74	139 1 5½	112.76
128	Duckenfield -	276	—	—	23	50	—	73	172 8 0	141.69
129	Manchester -	279.75	—	—	—	73	—	73	141 17 1	115.02
130	Warrington -	276	34 to 36	35	72	—	—	72	86 6 6	71.93
131	Disley -	214.5	24 to 36	32	68	—	—	68	92 9 2	104.97
132	Manchester -	264	20 to 26	23	66	—	—	66	105 12 11	100.40
133	Oldham -	238	40 to 60	50	60	—	—	60	121 3 1½	140.50
134	Glossop -	276	60	60	52	—	1	53	99 15 7	108.50
135	Oldham -	276	20 to 26	23	53	—	—	53	84 17 2½	96.06

	Town or Place in or near which the Mills are situate.	Hours during which the Mill worked in the Month ending May 4, 1833.	Counts spun.	Average Counts spun.	Number of Persons engaged in preparing and spinning Cotton.	Number of Persons engaged in Weaving.	Number of Persons engaged as Engineers, Mechanics, Roller Coverers, &c.	Total Number employed.	Total NET Earnings realised by the Total NUMBER of Persons given in the preceding Column during the Month ending 4th May 1833, and for working the Number of Hours given in the Third Column.	Average Weekly Net Earnings of each Individual, calculated for 69 Hours.
									£ s. d.	Pence.
136	Glossop - -	296	50	50	52	—	—	52	113 17 0	122.48
137	Ditto - -	294	40	40	49	—	3	52	94 12 9	102.51
138	Oldham - -	276	12 to 40	26	49	—	—	49	84 1 2	103.47
139	Brinnington -	267	36	36	47	—	—	47	113 6	149.54
140	Manchester -	270	18 to 42	25.02	47	—	—	47	85 19 5	112.18
141	Duckenfield -	296	50 to 60	55	44	—	1	45	102 6 5	127.20
142	Charlestown -	308	33, 35, & 36	34.66	44	—	—	44	97 14 5	119.41
143	Glossop - -	286	40	40	43	—	—	43	95 15 8	128.97
144	Stockport - -	282	20 to 26	23	36	2	1	39	66 17 5	100.68
145	Hayfield - -	276	40	40	38	—	—	38	69 18 0	110.36
146	Glossop - -	Under 18 } 264 Above 300 }	20 to 24	22	37	—	—	37	62 7 10	100.58
147	Oldham - -									
148	Glossop - -	286	40	40	27	—	—	27	45 16 4	98.25
149	Mottram - -	240	38 to 42	40	26	—	—	26	60 0 0	159.23
150	Stockport - -	282	20 to 24	22	25	1	—	26	44 9 1	100.40
151	Mellor - -	267	8	8	19	—	—	19	31 4 9½	101.97
					31,444	16,040	1,161	48,645	100,971 18 11¼	125.13

SAMUEL STANWAY.

SUPPLEMENT (A.) (GENERAL.)

Shewing the Distribution of the 48,645 hands (employed in the 151 mills given in the preceding LIST) in the different Places mentioned, their Ages, Sex, &c. the Aggregate NET Earnings of the whole Number, and the Average NET Earnings of an individual, in each place, for 69 hours work.

Place of Employment.	Adults.*		Children under Eighteen Years.						Total Number em- ployed.	Aggregate Number of Hours worked by the whole, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Amount of their Net Earnings for the Month ending 4th May 1833.	Average Weekly Net Earnings of each Individual, calculated for 69 Hours.		
	Males.	Females.	Males.			Females.									
			In the direct Employ of Masters.	In the direct Employ of Ope- ratives.	Em- ployers uncer- tain.	In the direct Employ of Masters.	In the direct Employ of Ope- ratives.	Em- ployers uncer- tain.							
Manchester and im- mediate neigh- bourhood - - Stockport & Heaton Norris - - Duckenfield & Stay- ley Bridge - - Hyde, Brinnington, &c. - - Tintwistle, Glossop, &c. - - Oldham - - Bolton - - Warrington - - One mill at Bury -	4,421 2,314 1,251 1,936 728 1,318 1,443 207 122	5,731 2,175 1,256 2,451 675 824 1,279 235 195	1,423 609 87 698 108 198 356 38 68	2,349 917 458 598 445 575 1,069 105 41	29 30 7 27 19 40 — — —	1,957 883 240 1,402 262 506 657 63 121	1,451 525 192 127 227 276 665 68 10	29 38 25 10 18 38 — — —	17,390 7,491 3,516 7,249 2,482 3,775 5,469 716 557	4,737,977.1 2,057,002.0 1,016,789.0 2,020,639.5 678,228.7 987,294.0 1,510,984.0 200,951.0 152,339 5	272.4 274 5 289.1 278.7 273.2 261.5 276.2 280.6 273.5	£ 35,089 16,399 7,822 16,629 4,951 7,577 10,174 1,320 1,009	s. 2 7 2 6 4 3 8 3 1	d 3½ 6¾ 6 0½ 0 3 0½ 7½ 7½	Pence. 122.64 132.02 127.39 136.28 120.89 127.09 111.50 108.79 109.69
	13,740	14,821	3,585	6,557	152	6,091	3,541	158	48,645	13,362,204.8	274.6	100,971 18 11¼	125.13		

* The word " Adult " is used throughout these Tables to signify a Person who has completed the Eighteenth year of Age.

SUPPLEMENT (B.) (GENERAL.)

Distributing the 48,645 Hands into eight different BRANCHES or DEPARTMENTS of Cotton-Working, and shewing the Aggregate NET Earnings of the whole Number of the Operatives in each Branch, and the Average NET Earnings of an Operative in each, for 69 hours Work.

Employed in	Adults.		Children under Eighteen Years.						Total Number em- ployed.	Aggregate Number of Hours worked by the whole, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Amount of their Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.			Females.							
			In the direct Employ of Masters.	In the direct Employ of Operatives.	Employers uncertain.	In the direct Employ of Masters.	In the direct Employ of Operatives.	Employers uncertain.					
Cleaning & spread- ing cotton	272	689	212	1	9	94	2	3	1,282	353,660.5	275.8	£ 2,111 s. 1 d. 5	98.85
Carding -	2,350	3,501	1,229	81	18	2,061	117	40	9,397	2,591,188.7	275.7	17,252 16 8½	110.26
Mule-spinning -	5,163	1,189	697	5,852	50	346	2,284	24	15,605	4,291,208.6	274.9	33,057 12 2¾	127.57
Throstle-spinning	194	688	373	4	32	500	4	51	1,846	501,621.5	271.7	2,819 1 6¼	93.06
Reeling -	146	2,552	40	5	—	542	23	8	3,316	906,261.8	273.2	5,213 14 3¼	95.26
Weaving -	4,627	6,108	986	610	35	2,538	1,104	32	16,040	4,400,274.7	274.3	36,080 19 11	135.78
Roller covering	61	87	5	1	—	9	7	—	170	47,268.3	278.0	414 15 7	145.31
As engineers, firemen, me- chanics, &c.	927	7	43	3	8	1	—	—	989	270,720.7	273.7	4,021 17 2¾	246.01
	13,740	14,821	3,585	6,557	152	6,091	3,541	158	48,645	13,362,204.8	274.6	100,971 18 11¼	125.13

SUPPLEMENT (C.) (GENERAL.)

Showing the Number of Children under 14 years of Age comprehended in the Total number of 48,645 Hands, the Aggregate NET Earnings of the whole Number of Children under 14, and the Average NET Earnings of a Child under 14, for 69 hours work.*

Place of Employment.	Persons Eighteen Years of Age and upwards.			Persons above Fourteen and under Eighteen.			Children under Fourteen.				Average Net Earnings per Week of each Child under Fourteen.		
	Males.	Females.	Total Number.	Males.	Females.	Total Number.	Males.	Females.	Total Number.	Aggregate NET Earnings of the whole Number of Children for the Month ending 4th May 1833.			
Manchester and immediate neighbourhood - - }	4,421	5,731	10,152	1,514	1,887	3,401	2,287	1,550	3,837	£ 2,861	s. 3	d. 9¾	44.74
Stockport and Heaton Norris	2,314	2,175	4,489	583	777	1,360	973	669	1,642	1,370	15	8	50.08
Duckenfield and Stayley Bridge - - - }	1,251	1,256	2,507	232	163	395	320	294	614	480	2	5½	46.91
Hyde, Brinnington, &c.	1,936	2,451	4,387	666	924	1,590	657	615	1,272	1,256	1	5½	59.24
Tintwistle, Glossop, &c. -	728	675	1,403	324	252	576	248	255	503	422	4	4½	50.36
Oldham - - -	1,318	824	2,142	371	422	793	442	398	840	603	9	0	43.10
Bolton - - -	1,443	1,279	2,722	570	637	1,207	855	685	1,540	956	14	3½	37.27
Warrington - - -	207	235	442	53	55	108	90	76	166	109	5	8	39.50
One mill at Bury - -	122	195	317	40	73	113	69	58	127	83	17	8½	39.63
	13,740	14,821	28,561	4,353	5,190	9,543	5,941	4,600	10,541	8,143	14	5¼	46.35

Of which total number of 10,541 Children under the age of 14,
There are in the direct employ of the mill owners - - - 3,931
Ditto ditto of operatives - - - 5,898
And of those whose direct employer is unknown - - - 712
10,541

* The statement of time worked by children under 14, and also of Engineers, is to be taken with the modification specified in the Preface page 5. This remark is to apply throughout.

SUPPLEMENT (D.) (GENERAL.)

The 48,645 Hands exhibit the following Proportions in 100, of Persons above 18 Years of Age, of Persons above 14 and under 18, and of children under 14. The Proportions of the Sexes of each age are likewise exhibited.

Place of Employment.	Adults.		Persons above Fourteen and under Eighteen.		Children under Fourteen.		Total Adults.	Total Non-adults.	Total Males.	Total Females.
	Males.	Females.	Males.	Females.	Males.	Females.				
Manchester and immediate neighbourhood - - - }	25.42	32.96	8.71	10.85	13.15	8.91	58.38	41.62	47.28	52.72
Stockport and Heaton Norris - - -	30.87	29.06	7.78	10.37	12.99	8.93	59.93	40.07	51.64	48.36
Duckenfield and Stayley Bridge - - -	35.58	35.72	6.60	4.64	9.10	8.36	71.30	28.70	51.28	48.72
Hyde, Brinnington, &c. - - -	26.71	33.81	9.19	12.75	9.06	8.48	60.52	39.48	44.96	55.04
Tintwistle, Glossop, &c. - - -	29.33	27.20	13.06	10.15	9.99	10.27	56.53	43.47	52.38	47.62
Oldham - - - -	34.91	21.83	9.83	11.18	11.71	10.54	56.74	43.26	56.45	43.55
Bolton - - - -	26.38	23.39	10.42	11.65	15.63	12.53	49.77	50.23	52.43	47.57
Warrington - - - -	28.91	32.82	7.40	7.68	12.57	10.62	61.73	38.27	48.88	51.12
One mill at Bury - - - -	21.90	35.01	7.18	13.11	12.39	10.41	56.91	43.09	41.47	58.53
Total Average - - -	28.24	30.47	8.95	10.67	12.21	9.46	58.71	41.29	49.40	50.60

SUPPLEMENT (E.) (GENERAL.)

Showing the Average Net Earnings of certain Classes of Operatives employed in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, in all the Districts, as specified in Supplement (C.)

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Total Number of Persons employed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for Sixty-nine Hours.
Carding - - -	Carders or overlookers	Male adults - - - - -	376	103,495.9	275.2	£ 1,762 17 3½	Pence. 282.06
	Jack-frame tenters -	Principally female adults - -	696	190,385.0	273.5	1,103 10 3½	95.98
	Bobbin-frame tenters -	Ditto ditto - - -	945	261,650.1	276.8	1,414 3 5	89.50
	Drawing tenters - -	Ditto ditto - - -	1,931	532,287.3	275.6	2,885 3 8½	89.76
Mule-spinning -	Overlookers - - -	Male adults - - - - -	145	40,018.6	275.9	848 2 2	350 95
	Spinners - - -	Male and female adults, but principally the former	3,797	1,046,252.0	275.5	19,454 3 5	307.91
	Piecers - - -	Male and female adults and non-adults, but principally the latter	7,157	1,966,804.8	274.8	7,688 14 8½	64.73
	Scavengers - - -	Male and female non-adults	1,247	340,019.1	272.6	712 2 11½	34.68
Throstle-spinning	Overlookers - - -	Male adults - - - - -	82	22,371.9	272.8	362 14 11½	268.51
	Spinners - - -	Female adults & non-adults	1,123	305,712.4	272.2	1,716 17 6½	93.00
Weaving - - -	Overlookers - - -	Male adults - - - - -	400	109,577.0	273.9	2,088 1 4	315.56
	Warpers - - -	Male and female adults - -	332	90,660.2	273.0	805 5 0	147.08
	Weavers - - -	Male and female adults, male and female non-adults, but chiefly females - -	10,171	2,784,258.7	273.7	21,835 9 6½	129.87
	Dressers - - -	Male adults - - - - -	836	230,771.0	276.0	4,650 4 11	333 69

SUPPLEMENT (F.) (GENERAL.)

Showing the Average Net Earnings per Week of 69 Hours, of each class of Operatives employed in the Eight different BRANCHES of Cotton working in the under-mentioned Districts.

Employed in	Manchester and its immediate Neighbourhood.	Stockport and Heaton Norris.	Duckenfield and Stayley Bridge.	Hyde, Brinnington, etc.	Tintwistle, Glossop, etc.	Oldham.	Bolton.	Warrington.	Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69 Hours.
	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
Cleaning and spreading cotton -	84.68	174.14	80.52	162.70	*267.69	103.13	91.35	67.27	98.85
Carding - - - - -	118.59	107.31	120.37	113.28	110.79	107.02	92.22	90.31	110.26
Mule-spinning - - -	126.96	135.99	125.47	132.78	123.71	138.06	122.14	107.11	127.57
Throstle spinning - - -	93.67	99.29	108.07	90.60	96.00	82.11	95.24	58.02	93.06
Reeling - - - - -	97.65	96.70	94.34	88.20	90.00	100.85	86.14	77.24	95.26
Weaving - - - - -	127.41	136.80	142.20	144.63	141.36	131.10	123.74	122.06	135.78
Roller covering - - -	145.87	155.32	136.01	160.30	86.18	176.50	152.45	103.45	145.31
As engineers, mechanics, fire-men, &c. - - - - -	255.36	265.66	206.36	217.13	229.40	252.08	211.45	231.76	246.01
Total Average - - -	122.64	132.02	127.39	136.28	120.89	127.09	111.50	108.79	125.13

* None but adults are returned as employed in this department in Tintwistle, &c.

SUPPLEMENT (G.) (GENERAL.)

Showing the Average Net Earnings per Week of 69 Hours, of certain Classes of Operatives employed in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, in the under-mentioned Districts.

Denomination of Process in which employed.	Class of Operatives.	Manchester and its immediate Neighbourhood.	Stockport and Heaton Norris.	Duckenfield and Stayley Bridge.	Hyde, Brinnington, etc.	Tintwistle, Glossop, etc.	Oldham.	Bolton.	Warrington.	Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for 69 Hours.
		Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
Carding -	Carders or overlookers	314.46	283.65	249.60	245.73	258.11	304.19	256.94	209.87	282.06
	Jack-frame tenters -	103.26	111.64	102.01	100.92	95.21	91.01	62.54	69.52	95.98
	Bobbin-frame tenters -	103.92	95.76	95.52	101.96	92.78	76.26	67.94	73.79	89.50
	Drawing tenters -	101.73	92.38	92.57	76.48	87.78	95.31	70.82	72.91	89.76
Mule-spinning	Overlookers - - -	392.55	314.69	311.25	363.54	364.90	277.30	303.43	345.60	350.95
	Spinners - - -	325.64	291.46	247.96	284.78	274.80	312.68	341.71	287.75	307.91
	Piecers - - -	70.37	70.41	66.34	55.28	58.96	74.03	56.10	59.82	64.73
	Scavengers - - -	33.15	39.87	43.05	42.65	41.49	30.92	33.38	29.86	34.68
Throstle-spinning	Overlookers - - -	281.10	284.40	237.50	226.64	296.28	270.68	217.41	—	268.51
	Spinners - - -	91.85	100.03	102.40	102.88	104.23	79.37	90.21	56.01	93.00
Weaving -	Overlookers - - -	293.86	354.81	271.81	308.14	373.44	295.81	282.56	270.72	315.56
	Warpers - - -	142.35	147.86	121.76	150.52	215.55	150.50	152.87	131.03	147.08
	Weavers - - -	129.93	128.25	135.47	132.50	137.60	128.51	111.19	141.65	129.87
	Dressers - - -	323.70	349.36	290.78	344.89	345.63	353.48	286.03	369.04	333.69

FACTORY COMMISSION:

SUPPLEMENT (H.) (LOCAL.)

Distributing the 17,390 Operatives employed in MANCHESTER and in the IMMEDIATE NEIGHBOURHOOD, and concerning whom COMPLETE Returns were obtained, into the Eight different BRANCHES of Cotton-working specified in General Supplement (B.), and exhibiting similar Results.

Employed in	Adults.		Children under Eighteen Years.						Total Number em- ployed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69Hours.
	Males.	Females.	Males.			Females.							
			In the Employ of Masters.	In the Employ of Ope- ratives.	Em- ployers uncer- tain.	In the Employ of Masters.	In the Employ of Ope- ratives.	Em- ployers uncer- tain.					
Cleaning and spread- ing cotton - - }	92	493	152	—	—	68	—	1	806	220,674.9	273.7	£ s. d. 1,128 9 0½	Pence. 84.68
Carding - -	783	1,352	404	3	5	579	41	—	3,167	866,545.1	273.6	6,205 17 4	118.59
Mule-spinning -	1,745	606	364	2,147	12	233	1,058	7	6,172	1,690,261.1	273.8	12,959 3 10½	126.96
Throstle-spinning -	90	388	181	—	9	286	—	18	972	265,255.6	272.8	1,500 8 4	93.67
Reeling - -	67	1,446	36	1	—	277	—	3	1,830	502,030.9	274.3	2,960 12 6	97.65
Weaving - -	1,127	1,407	251	197	—	507	347	—	3,836	1,029,429.1	268.3	7,920 14 10½	127.41
Roller covering -	16	34	—	1	—	6	5	—	62	16,901.6	272.6	148 17 7½	145.87
And as engineers, mechanics, fire- men, &c. - - }	501	5	35	—	3	1	—	—	545	146,878.8	269.5	2,264 18 8½	255.36
	4,421	5,731	1,423	2,349	29	1,957	1,451	29	17,390	4,737,977.1	272.4	35,089 2 3½	122.64

In addition to the number of 17,390 Operatives, concerning whom complete Returns were obtained from MANCHES- TER and the IMMEDIATE NEIGHBOURHOOD, incomplete Returns were obtained regarding 5,052 others who were either employed in Mills working both night and day, or the duration of whose work was not stated by the hour. The Distribution of the total Number of 22,442, and the Aggregate of their NET Earnings, is an under. See List II., incomplete Returns.

Employed in	Total Number employed.	Aggregate NET Earnings for the Month ending 4th May 1833.		
		£	s.	d.
Cleaning and spreading cotton - -	912	1,275	6	8½
Carding - -	3,986	7,713	10	5½
Mule-spinning - -	7,458	15,767	8	1
Throstle-spinning - -	1,190	1,814	11	2½
Reeling - -	2,526	4,024	1	11½
Weaving - -	5,672	11,815	8	10½
Roller covering - -	82	202	18	8
And as engineers, mechanics, firemen, &c. -	616	2,551	3	5½
	22,442	45,164	9	5

SUPPLEMENT (I.) (LOCAL.)

Showing the Average Net Earnings of certain Classes of Operatives employed in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, in MANCHESTER and IMMEDIATE NEIGHBOURHOOD.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for Sixty-nine Hours.
Carding - -	Carders or overlookers	Male adults - - -	121	33,084.5	273.4	£ s. d. 628 5 1½	Pence. 314.46
	Jack-frame tenters	Principally female adults -	192	52,600.7	273.9	330 2 0½	103.26
	Bobbin-frame tenters	Ditto ditto - - -	182	49,841.0	273.8	310 15 11½	103.92
	Drawing tenters	Ditto ditto - - -	638	174,129.7	272.9	1,069 15 8½	101.79
Mule-spinning -	Overlookers - -	Male adults - - -	57	15,565.3	273.0	368 19 7	392.55
	Spinners - -	Male and female adults, but principally the former -	1,435	392,409.9	273.4	7,716 12 11½	325.64
	Piecers - -	Male and female adults and non-adults, but principally the latter - - -	2,697	738,404.9	273.7	3,137 16 11½	70.37
	Scavengers - -	Male and female non-adults -	884	241,598.1	273.3	483 14 2	33.15
Throstle-spinning	Overlookers - -	Male adults - - -	39	10,699.6	274.3	181 12 6	281.10
	Spinners - -	Female adults and non adults	596	162,720.5	273.0	902 12 8	91.85
Weaving - -	Overlookers - -	Male adults - - -	95	25,144.1	264.6	446 3 9	293.86
	Warpers - -	Male and female adults -	86	23,428.8	272.4	201 8 1	142.35
	Weavers - -	Male and female adults, but chiefly females - -	2,021	536,923.4	265.6	4,212 17 6	129.93
	Dressers - -	Male adults - - -	133	36,415.7	273.8	711 16 6	323.70

SUPPLEMENT (K.) (LOCAL.)

Distributing the 7,491 Operatives employed in STOCKPORT and HEATON NORRIS, and concerning whom COMPLETE Returns were obtained, into the Eight different BRANCHES of Cotton-working specified in General Supplement (B.), and exhibiting similar Results.

Employed in	Adults.		Children under Eighteen Years.						Total Number em- ployed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69 Hours.
			Males.			Females.							
	Males.	Females.	In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.	In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.					
Cleaning & spreading cotton	78	13	18	—	2	—	—	1	112	31,467.0	280.9	£ s. d. 330 18 0½	Pence. 174.14
Carding - -	254	434	176	1	3	247	10	4	1,129	309,401.0	274.0	2,005 1 2	107.31
Mule-spinning -	556	37	58	634	—	2	58	—	1,345	369,148.5	274.4	3,031 11 10	135.99
Throstle-spinning	30	161	70	2	23	46	—	32	364	99,124.5	272.3	594 6 7	99.29
Reeling - -	4	114	—	—	—	34	—	1	153	42,045.5	274.8	245 10 6½	96.70
Weaving - -	1,276	1,408	282	280	—	553	457	—	4,256	1,169,568.5	274.8	9,662 3 5½	136.80
Roller covering	14	8	5	—	—	1	—	—	28	7,759.0	277.1	72 15 6	155.32
And as engineers, mechanics, firemen, &c.	102	—	—	—	2	—	—	—	104	28,488.0	273.9	457 0 5¼	265.66
	2,314	2,175	609	917	30	883	525	38	7,491	2,057,002.0	274.5	16,399 7 6¾	132.02

In addition to this number of 7,491 Operatives, regarding whom complete Returns were obtained from STOCKPORT and HEATON NORRIS, incomplete Returns were obtained regarding 905 others, the duration of whose work was not stated by the hour. The distribution of the total number of 8,396, and the Aggregate of their NET Earnings, is as under. See List II., incomplete Returns.

Employed in	Total Number employed.	Aggregate NET Earnings for the Month ending 4th May 1833.
		£ s. d.
Cleaning and spreading cotton - - -	127	355 10 3½
Carding - - -	1,313	2,360 7 0
Mule-spinning - - -	1,532	3,488 14 2½
Throstle-spinning - - -	475	790 0 1½
Reeling - - -	204	333 13 4½
Weaving - - -	4,590	10,462 9 10
Roller covering - - -	34	85 15 1
And as engineers, mechanics, firemen, &c. -	121	528 15 10¼
	8,396	18,405 5 9¼

SUPPLEMENT (L.) (LOCAL.)

Showing the Average Net Earnings of certain Classes of Operatives employed in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, at STOCKPORT and HEATON NORRIS.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for Sixty-nine Hours.
Carding - - -	Carders or overlookers	Male adults - - - - -	55	15,139.5	275.2	£ s. d. 259 6 5½	Pence. 283.64
	Jack-frame tenters	Principally female adults -	155	42,607.5	274.8	287 5 3½	111.65
	Bobbin-frame tenters	Ditto ditto - - - - -	103	27,948.5	271.3	161 12 6½	95.76
	Drawing tenters	Ditto ditto - - - - -	253	68,564.0	271.1	382 9 9	92.38
Mule-spinning -	Overlookers - - -	Male adults - - - - -	10	2,769.5	276.9	52 12 7	314.69
	Spinners - - -	Male and female adults, but principally the former -	398	108,990.0	273.8	1,918 5 9	291.46
	Piecers - - -	Male and female adults and non-adults, but principally the latter - - -	571	156,013.0	273.2	663 7 2	70.41
Throstle-spinning	Scavengers - - -	Male and female non-adults	93	25,059.0	269.4	60 6 9½	39.87
	Overlookers - - -	Male adults - - - - -	17	4,681.0	275.3	80 7 10	284.40
	Spinners - - -	Female adults and non-adults	221	60,384.0	273.2	364 15 5½	100.03
Weaving - - -	Overlookers - - -	Male adults - - - - -	113	30,946.1	273.8	663 0 11	354.81
	Warpers - - -	Male and female adults - -	96	26,345.1	274.4	235 4 8	147.86
	Weavers - - -	Male and female adults, male and female non-adults, but chiefly females - - -	2,888	786,657.1	272.3	6,092 10 2	128.25
	Dressers - - -	Male adults - - - - -	234	64,150.1	274.1	1,353 7 8½	349.36

SUPPLEMENT (M.) (LOCAL.)

Distributing the 3,516 Operatives employed in DUCKENFIELD and STAYLEY BRIDGE, and concerning whom COMPLETE Returns were obtained, into the Eight different BRANCHES of Cotton-working specified in General Supplement (B.), and exhibiting similar results.

Employed in	Adults.		Children under Eighteen Years.						Total Number employed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.			Females.							
			In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.	In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.					
Cleaning & spreading cotton	16	39	1	—	4	17	—	1	78	23,267	298.2	£ 113 s. 2 d. 10½	Pence. 80.52
Carding - -	292	406	37	15	3	70	20	18	861	250,159	290.5	1,818 8 4½	120.37
Mule-spinning -	538	129	23	443	—	28	137	4	1,302	374,782	287.8	2,839 15 5½	125.47
Throstle-spinning	6	5	4	—	—	1	—	1	17	4,692	276.0	30 12 5	108.07
Reeling - -	15	135	—	—	—	19	12	1	182	52,871	290.5	301 4 1	94.34
Weaving - -	333	528	22	—	—	105	23	—	1,011	291,834	288.6	2,506 1 0	142.20
Roller covering	7	14	—	—	—	—	—	—	21	6,155	293.0	50 11 0½	136.01
And as engineers, mechanics, firemen, &c. -	44	—	—	—	—	—	—	—	44	13,029	296.1	162 7 3	206.36
	1,251	1,256	87	458	7	240	192	25	3,516	1,016,789	289.1	7,822 2 6	127.39

In addition to this number of 3,516 operatives, concerning whom complete returns were obtained from DUCKENFIELD and STAYLEY BRIDGE, incomplete returns were obtained of 5,026 others, the duration of whose work was not stated by the hour. The distribution of the total number of 8,542, and the Aggregate of their NET Earnings, is as under. See List II., incomplete Returns.

Employed in	Total Number employed.	Aggregate NET Earnings for the Month ending 4th May 1833.
		£ s. d.
Cleaning and spreading cotton	133	325 10 10½
Carding	1,799	3,761 19 10
Mule-spinning	2,687	6,066 14 11½
Throstle-spinning	23	40 10 5
Reeling	252	423 7 1
Weaving	3,473	8,187 11 9
Roller covering	33	74 13 3
And as engineers, mechanics, firemen, &c.	142	528 19 3½
	8,542	19,409 7 5½

SUPPLEMENT (N.) (LOCAL.)

Showing the Average Net Earnings of certain Classes of Operatives employed in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, in DUCKENFIELD and STAYLEY BRIDGE.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for Sixty-nine Hours.
Carding	Carders or overlookers	Male adults	31	8,873	286.2	£ 133 14 10	Pence. 249.60
	Jack-frame tenters	Principally female adults	37	10,688	288.8	65 16 9½	102.01
	Bobbin-frame tenters	Ditto ditto	113	32,833	290.5	189 8 0½	95.52
	Drawing tenters	Ditto ditto	192	56,581	294.6	316 6 2	92.57
Mule-spinning	Overlookers	Male adults	18	5,214	289.6	98 0 0	311.25
	Spinners	Male and female adults, but principally the former	402	116,519	289.8	1,744 14 0½	247.96
	Piecers	Male and female adults and non-adults, but principally the latter	687	195,305	284.2	782 9 0	66.34
	Scavengers	Male and female non-adults	21	6,061	288.6	15 15 2	43.05
Throstle-spinning	Overlookers	Male adults	1	276	276.0	3 19 2	237.50
	Spinners	Females, adult and non-adult	10	2,760	276.0	17 1 4	102.40
Weaving	Overlookers	Male adults	40	11,548	288.7	189 10 11	271.81
	Warpers	Male and female adults	23	6,575	285.8	48 6 10½	121.76
	Weavers	Male and female adults, male and female non-adults, but chiefly females	958	274,755	286.8	2,247 15 5	135.47
	Dressers	Male adults	97	27,671	285.2	485 17 9	290.78

SUPPLEMENT (O.) (LOCAL.)

Distributing the 7,429 Operatives employed in BRINNINGTON, HYDE, &c., and concerning whom COMPLETE Returns were obtained, into the Eight different BRANCHES of Cotton-working specified in General Supplement (B.), and exhibiting similar Results.

Employed in	Adults.		Children under Eighteen Years.						Total Number em- ployed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.			Females.							
			In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.	In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.					
Cleaning & spread- ing cotton - -	30	11	11	1	3	—	2	—	58	16,158.6	278.5	£ s. d.	Pence.
Carding - -	310	358	167	8	—	301	7	—	1,151	320,567.7	278.5	2,193 0 11	113.28
Mule-spinning -	512	31	207	573	21	37	14	10	1,405	390,928.0	278.2	3,134 14 9½	132.78
Throstle-spinning	8	63	35	—	—	43	—	—	149	41,271.9	276.9	225 16 0½	90.60
Reeling - -	2	77	2	—	—	18	4	—	103	28,506.2	276.7	151 16 9½	88.20
Weaving - -	1,009	1,901	275	16	—	1,002	100	—	4,303	1,200,240.6	278.9	10,483 2 11	144.63
Roller covering	9	10	—	—	—	1	—	—	20	5,586.6	279.3	54 1 7½	160.30
And as engineers, mechanics, fire- men, &c. - -	56	—	1	—	3	—	—	—	60	17,379.9	289.6	227 17 8	217.13
	1,936	2,451	698	598	27	1,402	127	10	7,249	2,020,639.5	278.7	16,629 6 0½	136.28

In addition to this number of 7,429 Operatives concerning whom complete Returns were obtained from BRINNINGTON, HYDE, &c., incomplete Returns were obtained of 3,133 others, the duration of whose work was not stated by the hour. The distribution of the total number of 10,382, and the Aggregate of their NET Earnings, is as under. See List II., incomplete Returns.

Employed in	Total Number employed.	Aggregate NET Earnings for the Month ending 4th May 1833.
		£ s. d.
Cleaning and spreading cotton - - -	137	319 18 7½
Carding - - -	1,736	3,332 13 9½
Mule-spinning - - -	2,100	4,569 7 8½
Throstle-spinning - - -	195	287 1 4½
Reeling - - -	160	224 2 8½
Weaving - - -	5,923	14,200 5 11
Roller covering - - -	29	79 8 0½
And as engineers, mechanics, firemen, &c. -	102	384 18 8
	10,382	23,397 16 10

SUPPLEMENT (P.) (LOCAL.)

Showing the Average Net Earnings of certain Classes of Operatives engaged in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, at BRINNINGTON, HYDE, &c.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for Sixty-nine Hours.
						£ s. d.	Pence.
Carding - -	Carders or overlookers	Male adults - - -	46	12,801.9	278.3	189 19 3½	245.73
	Jack-frame tenters -	Principally female adults -	90	25,056.8	278.4	152 14 1	100.92
	Bobbin-frame tenters	Ditto - - ditto -	168	47,338.6	281.7	291 9 6½	101.96
	Drawing tenters -	Ditto - - ditto -	235	65,576.0	279.0	302 17 6¼	76.48
Mule-spinning -	Overlookers - -	Male adults - - -	23	6,332.3	275.3	139 0 3	363.54
	Spinners - -	Male and female adults, but principally the former -	380	106,185.0	279.4	1,826 1 10	284.78
	Piecers - -	Male and female adults and non-adults, but principally non-adults - - -	572	160,588.0	280.7	536 3 0½	55.28
	Scavengers - -	Male and female non-adults -	80	21,946.0	274.3	56 10 7	42.65
Throstle-spinning	Overlookers - -	Male adults - - -	5	1,399.8	279.9	19 3 2	226.64
	Spinners - -	Male and female adults, and non-adults - - -	87	24,129.4	277.3	149 18 4½	102.88
Weaving - -	Overlookers - -	Male adults - - -	107	29,706.8	277.6	552 15 6½	308.14
	Warpers - -	Male and female adults -	64	17,778.8	277.7	161 12 2	150.52
	Weavers - -	Male and female adults, but chiefly females -	2,835	794,596.7	280.2	6,357 18 6	132.50
	Dressers - -	Male adults - - -	250	69,907.2	279.6	1,455 18 9½	344.89

SUPPLEMENT (Q.) (LOCAL.)

Distributing the 2,482 Operatives employed in TINTWISTLE, GLOSSOP, &c., and concerning whom COMPLETE Returns were obtained, into the Eight different BRANCHES of Cotton-working specified in General Supplement (B.), and exhibiting similar Results.

Employed in	Adults.		Children under Eighteen Years.						Total Number em- ployed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.			Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.			Females.						£	s.	d.	
			In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.	In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.							Pence.
Cleaning & spread- ing cotton	13	—	—	—	—	—	—	—	13	3,738.0	287.5	60	8	6	267.69
Carding -	163	198	53	17	7	105	16	14	573	159,815.9	278.9	1,069	5	11	110.79
Mule-spinning -	381	46	22	427	12	9	188	1	1,086	294,369.0	271.0	2,199	2	11 ¹ / ₄	123.71
Throstle-spinning	7	18	10	—	—	9	—	—	44	11,500.5	261.3	66	13	6 ³ / ₄	96.00
Reeling -	7	244	—	—	—	53	1	3	308	83,085.2	269.7	451	11	7	90.00
Weaving -	127	166	22	1	—	85	22	—	423	115,692.0	273.5	987	11	11 ¹ / ₄	141.36
Roller covering -	5	3	—	—	—	1	—	—	9	2,595.1	288.3	13	10	1 ¹ / ₂	86.18
And as engineers, mechanics, fire- men, &c.	25	—	1	—	—	—	—	—	26	7,433.0	285.8	102	19	5	229.40
	728	675	108	445	19	262	227	18	2,482	678,228.7	273.2	4,951	4	0	120.89

In addition to this number of 2,482 Operatives, concerning whom complete Returns were obtained from TINTWISTLE, GLOSSOP, &c., incomplete Returns were obtained of 1,888 others, the duration of whose work was not stated *by the hour*. The distribution of the *total* number of 4,370, and the Aggregate of their NET Earnings, is as under. See List II., incomplete Returns

Employed in	Total Number employed.	Aggregate NET Earnings for the Month ending 4th May 1833.
Cleaning and spreading cotton - - -	37	£ 108 s. 1 d. 1
Carding - - - - -	957	1,799 1 8 ¹ / ₂
Mule-spinning - - - - -	1,492	3,182 12 4 ³ / ₄
Throstle-spinning - - - - -	225	311 12 3
Reeling - - - - -	501	683 8 8 ¹ / ₂
Weaving - - - - -	1,108	2,637 13 11
Roller covering - - - - -	18	34 0 10 ¹ / ₂
And as engineers, mechanics, firemen, &c. -	32	127 19 5
	4,370	8,884 10 4 ¹ / ₂

SUPPLEMENT (R.) (LOCAL.)

Showing the Average Net Earnings of certain Classes of Operatives engaged in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, at TINTWISTLE, GLOSSOP, &c.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for Sixty-nine Hours.
Carding -	Carders or overlookers	Male adults - - -	25	6,958.0	278.3	£ 108 s. 9 d. 0	Pence. 258.11
		Principally female adults -	18	4,846.0	269.2	27 17 3	95.21
		Bobbin-frame tenters - Ditto - - ditto -	41	11,505.0	280.6	64 9 2 ¹ / ₂	92.78
		Drawing tenters - Ditto - - ditto -	117	32,793.6	280.2	173 16 8 ¹ / ₂	87.78
Mule-spinning -	Overlookers -	Male adults - - -	5	1,391.5	278.3	30 13 3	364.90
		Male and female adults, but principally the former -	209	56,816.6	271.8	942 17 0 ¹ / ₂	274.80
		Male and female adults and non-adults, but principally non-adults - - -	481	124,748.9	259.3	444 3 5	58.96
		Male and female non-adults -	51	12,668.0	248.3	31 14 10 ¹ / ₂	41.49
Throstle-spinning	Overlookers -	Male adults - - -	3	789.0	263.0	14 2 4	296.28
	Spinners -	Male and female adults, and non-adults - - -	32	8,370.0	261.5	52 13 8	104.23
Weaving -	Overlookers -	Male adults - - -	10	2,741.0	274.1	61 16 3	373.44
		Male and female adults -	12	3,115.0	259.5	40 10 11	215.55
		Male and female adults, but chiefly females -	255	69,625.0	273.0	578 10 7 ¹ / ₂	137.60
		Male adults - - -	25	6,836.0	273.4	142 13 6 ¹ / ₂	345.63

SUPPLEMENT (S.) (LOCAL.)

Distributing the 3,775 Operatives employed in OLDHAM, and concerning whom COMPLETE Returns were obtained, into the Eight different BRANCHES of Cotton-working specified in General Supplement (B.), and exhibiting similar Results.

Employed in	Adults.		Children under Eighteen Years.						Total Number em- ployed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Nett Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.			Females.							
			In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.	In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.					
Cleaning & spreading cotton - -	14	13	9	—	—	4	—	—	40	10,142	253.5	£ s. d.	Pence.
Carding - -	166	222	70	34	—	274	1	4	771	201,416	261.2	1,301 13 9	107.02
Mule-spinning -	488	64	1	451	5	—	153	2	1,164	305,413	262.3	2,546 7 3	138.06
Throstle-spinning	15	16	47	2	—	41	4	—	125	31,739	253.9	157 7 6½	82.11
Reeling - -	40	208	1	4	—	58	6	—	317	81,416	256.8	495 16 8½	100.85
Weaving - -	506	299	68	81	35	129	111	32	1,261	331,017	262.5	2,620 14 0	131.10
Roller covering	2	2	—	—	—	—	1	—	5	1,326	265.2	14 2 8	176.50
And as engineers, mechanics, firemen, &c. -	87	—	2	3	—	—	—	—	92	24,825	269.8	377 18 0	252.08
	1,318	824	198	575	40	506	276	38	3,775	987,294	261.5	7,577 3 3	127.09

In addition to this number of 3,775 Operatives, concerning whom complete returns were obtained from OLDHAM, incomplete returns were obtained of 1,920 others, the duration of whose work has not been stated *by the hour*. The distribution of the *total* number of 5,695, and the Aggregate of their NET Earnings, is as under. See List II., incomplete Returns.

Employed in	Total Number employed.	Aggregate NET Earnings for the Month ending 4th May 1833.		
		£	s.	d.
Cleaning and spreading cotton - -	54	85	13	0
Carding - -	1,091	1,916	6	2
Mule-spinning - -	1,798	3,889	9	8½
Throstle-spinning - -	165	205	9	3
Reeling - -	525	884	11	8½
Weaving - -	1,928	3,959	3	9
Roller covering - -	7	19	14	6
And as engineers, mechanics, firemen, &c. -	127	507	1	8½
	5,695	11,467	9	9½

SUPPLEMENT (T.) (LOCAL.)

Showing the Average Net Earnings of certain Classes of Operatives employed in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, at OLDHAM.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Total Number of Hours worked by them during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.			Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for Sixty-nine Hours.
						£	s.	d.	Pence.
Carding - -	Carders or overlookers	Male adults - - -	34	8,938	262.8	164	3	8	304.19
	Jack-frame tenters	Principally female adults -	72	18,437	256.0	101	6	7	91.01
	Bobbin-frame tenters	Ditto ditto - - -	113	29,685	262.6	136	14	0½	76.26
	Drawing tenters	Ditto ditto - - -	165	42,950	260.3	247	4	4½	95.31
Mule-spinning -	Overlookers - -	Male adults - - -	5	1,266	253.2	21	4	0	277.30
	Spinners - -	Male and female adults, but principally the former -	226	58,463	258.6	1,103	18	3	312.68
	Piecers - -	Male and female adults and non-adults, but principally non-adults - - -	326	86,477	265.2	386	11	9½	74.03
	Scavengers - -	Male and female non-adults -	28	7,614	271.9	14	4	4½	30.92
Throstle-spinning	Overlookers - -	Male adults - - -	6	1,511	251.8	24	13	11½	270.68
	Spinners - -	Female adults and non-adults	60	15,214	253.5	72	18	5	79.37
Weaving - -	Overlookers - -	Male adults - - -	10	2,539	253.9	45	7	1	295.81
	Warpers - -	Male and female adults -	28	7,079	252.8	64	6	8½	150.50
	Weavers - -	Male and female adults, male and female non-adults, but chiefly females - - -	583	147,734	253.4	1,146	10	5½	128.51
	Dressers - -	Male adults - - -	47	12,033	256.0	256	17	0	353.48

SUPPLEMENT (U.) (LOCAL.)

Distributing the 5,469 Operatives employed in BOLTON, and concerning whom COMPLETE Returns were obtained, into the Eight different BRANCHES of Cotton-working specified in General Supplement (B.), and exhibiting similar Results.

Employed in	Adults.		Children under Eighteen Years.						Total Number em- ployed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.			Females.							
			In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.	In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.					
Cleaning & spread- ing cotton - -	26	117	8	—	—	5	—	—	156	42,981.0	275.5	£ s. d. 237 2 3½	Pence. 91.35
Carding - -	341	438	281	3	—	436	22	—	1,521	421,189.0	276.8	2,345 15 4	92.22
Mule-spinning -	847	227	20	1,066	—	37	636	—	2,833	783,417.5	276.5	5,778 9 6	122.14
Throstle-spinning	34	35	17	—	—	39	—	—	125	34,278.0	274.2	197 3 0	95.24
Reeling - -	9	285	1	—	—	80	—	—	375	103,064.0	274.8	536 2 11½	86.14
Weaving - -	95	162	28	—	—	60	6	—	351	96,121.5	273.8	718 5 4½	123.74
Roller covering	7	13	—	—	—	—	1	—	21	5,820.5	277.1	53 11 8	152.45
And as engineers, mechanics, fire- men, &c. -	84	2	1	—	—	—	—	—	87	24,112.5	277.1	307 17 11	211.45
	1,443	1,279	356	1,069	—	657	665	—	5,469	1,510,984.0	276.2	10,174 8 0½	111.50

In addition to this number of 5,469 Operatives, concerning whom complete Returns were obtained from BOLTON, incomplete returns were obtained of 705 others, the duration of whose work was not stated *by the hour*. The distribution of the *total* number of 6,174, and the Aggregate of their NET Earnings, is as under. See List II., incomplete Returns.

Employed in	Total Number employed.	Aggregate NET Earnings for the Month ending 4th May 1833.
Cleaning and spreading cotton - -	173	£ 260 6 11½
Carding - -	1,695	2,636 17 7
Mule-spinning - -	3,268	6,703 10 8½
Throstle-spinning - -	134	205 18 1
Reeling - -	423	605 8 5½
Weaving - -	367	755 17 0½
Roller-covering - -	23	57 6 10
As engineers, mechanics, firemen, &c. - -	91	323 9 11
	6,174	11,548 15 7

SUPPLEMENT (V.) (LOCAL.)

Showing the Average Net Earnings of certain Classes of Operatives employed in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, at BOLTON.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for Sixty-nine Hours.
Carding -	Carders or overlookers	Male adults - - -	56	15,452	275.9	239 15 0	Pence. 256.94
	Jack-frame tenters -	Principally female adults -	108	29,519	273.3	111 9 8	62.54
	Bobbin-frame tenters	Ditto ditto - - -	189	52,445	277.4	215 3 7	67.94
	Drawing tenters -	Ditto ditto - - -	302	83,683	277.0	357 18 4½	70.82
Mule-spinning -	Overlookers - -	Male adults - - -	23	6,358	276.4	116 10 0	303.43
	Spinners - -	Male and female adults, but principally the former -	675	186,895.5	276.8	3,856 12 3½	341.71
	Piecers - -	Male and female adults and non-adults, but principally non-adults - - -	1,688	467,717	277.0	1,584 14 8	56.10
	Scavengers - -	Male and female non-adults -	25	6,894	275.7	13 18 0	33.38
Throstle-spinning	Overlookers - -	Male adults - - -	10	2,742	274.2	36 0 0	217.41
	Spinners - -	Male and female adults and non-adults - - -	88	24,158	274.5	131 12 1	90.21
Weaving -	Overlookers - -	Male adults - - -	9	2,464	273.7	42 0 10½	282.56
	Warpers - -	Male and female adults -	14	3,844	274.5	35 9 8½	152.87
	Weavers - -	Male and female adults, male and female non-adults, but chiefly females - - -	236	64,614	273.7	433 17 5½	111.19
	Dressers - -	Male adults - - -	24	6,576	274.0	113 11 8½	286.03

SUPPLEMENT (W.) (LOCAL.)

Distributing the 716 Operatives employed in WARRINGTON, and concerning whom COMPLETE Returns were obtained, into the Eight different BRANCHES of Cotton-working specified in General Supplement (B.), and exhibiting similar Results.

Employed in	Adults.		Children under Eighteen Years.						Total Number em- ployed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.			Females.							
			In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.	In the Employ of Masters.	In the Employ of Operatives.	Employers uncertain.					
Cleaning & spreading cotton	1	2	2	—	—	—	—	—	5	1,403	280.6	£ s. d. 5 14 0	Pence. 67.27
Carding	31	61	18	—	—	20	—	—	130	36,386	279.8	198 9 0	90.31
Mule-spinning	66	33	—	74	—	—	32	—	205	57,454	280.2	371 11 8	107.11
Throstle-spinning	3	2	4	—	—	25	—	—	34	9,384	276.0	32 17 7	58.02
Reeling	—	43	—	—	—	3	—	—	46	12,696	276.0	59 4 5	77.24
Weaving	86	92	13	31	—	15	36	—	273	77,211	282.8	569 2 7½	122.06
Roller covering	1	2	—	—	—	—	—	—	3	851	283.6	5 6 4	103.45
And as engineers, mechanics, firemen, &c.	19	—	1	—	—	—	—	—	20	5,566	278.3	77 18 0	231.76
	207	235	38	105	—	63	68	—	716	200,951	280.6	1,320 3 7½	108.79

In addition to this number of 716 Operatives, concerning whom complete returns were obtained from WARRINGTON, incomplete returns were obtained of 386 others, the duration of whose work was not stated *by the hour*. The distribution of the *total* number of 1,102, and the Aggregate of their NET Earnings, is as under. See List II., incomplete Returns.

Employed in	Total Number employed.	Aggregate NET Earnings for the Month ending 4th May 1833.
Cleaning and spreading cotton	5	£ s. d. 5 14 0
Carding	198	293 3 4
Mule-spinning	304	523 5 7
Throstle-spinning	34	32 17 7
Reeling	46	59 4 5
Weaving	488	1,010 8 3¼
Roller covering	4	6 13 3½
And as engineers, mechanics, firemen, &c.	23	87 18 0
	1,102	2,019 4 6¼

SUPPLEMENT (X.) (LOCAL.)

Showing the Average Net Earnings of certain Classes of Operatives engaged in the Four PROCESSES of Carding, Mule-spinning, Throstle-spinning, and Weaving, at WARRINGTON.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Total Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.	Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for Sixty-nine Hours.
Carding	Carders or overlookers	Male adults	6	1,702	283.6	£ s. d. 21 11 5	Pence. 209.87
	Jack-frame tenters	Principally female adults	8	2,254	281.7	9 9 3	69.52
	Bobbin-frame tenters	Ditto ditto	28	7,866	280.9	35 1 1	73.79
	Drawing tenters	Ditto ditto	13	3,634	279.5	16 0 0	72.91
Mule-spinning	Overlookers	Male adults	2	575	287.5	12 0 0	345.60
	Spinners	Male and female adults, but principally the former	48	13,409	279.3	233 0 0	287.75
	Piecers	Male and female adults and non-adults	95	26,611	280.1	96 2 8	59.82
	Scavengers	Male and female non-adults	41	11,615	283.2	20 19 0	29.86
Throstle-spinning	Overlookers	Male adults	—	—	—	—	—
	Spinners	Female adults and non-adults	18	4,968	276	16 16 1	56.01
Weaving	Overlookers	Male adults	8	2,300	287.5	37 12 0	270.72
	Warpers	Male and female adults	4	1,127	281.7	8 18 4½	131.05
	Weavers	Male and female adults, male and female non-adults, but chiefly females	142	40,158	282.8	343 10 5	141.65
	Dressers	Male adults	10	2,806	280.6	62 10 8	369.04

FACTORY COMMISSION :

COTTON MILLS.

LIST II. (INCOMPLETE RETURNS.)

NOTICE.—The owners of the following Seventy mills having made returns which are incomplete, either as respects the number of hours worked during the month ending 4th May 1833, or the number of children in their employ under the age of fourteen, it has been impossible to state the net earnings by the hour, or the proportionate number of the children employed ; but as they are complete in all other respects, results have been extracted from them relative to numbers, ages, and sexes, which are stated in Supplementary Tables, (Y.) and (Z.)

	Town or Place in or near which the Mills are situate.	Counts spun.	Average Counts spun.	Number of Persons engaged in preparing and spinning Cotton.	Number of Persons engaged in Weaving.	Number of Persons engaged as Engineers, Mechanics, Roller Coverers, etc.	Total Number of Persons employed.	Aggregate Net Earnings for the Month ending 4th May 1833.
1	Newton - -	—	—	637	850	5	1,492	£ s. d. 3,122 8 11½
2	Stayley Bridge -	36	36	509	766	62	1,337	2,957 1 5
3	Stayley Bridge -	—	—	543	743	8	1,294	2,786 13 0
4	Duckenfield -	40 to 60	43.33	487	645	2	1,134	2,799 12 9
5	} Werneth - -	—	—	285	548	34	867	2,021 11 6
6	Glossop - -	32 to 40	36	273	511	1	785	1,918 15 9
7	Manchester - -	—	—	207	555	1	763	1,598 13 9
8	Gorton - -	30 to 40	35	239	458	28	725	1,650 2 6½
9	Oldham - -	20 to 60	35	309	186	20	515	1,069 11 4
10	} Duckenfield -	—	—	141	308	29	478	1,244 5 7
11	Oldham - -	—	—	210	221	8	439	909 6 0¼
12	Mellor - -	—	—	369	—	4	373	510 17 7
13	Stayley Bridge -	—	—	325	—	2	327	707 4 0
14	Godley - -	—	—	100	222	—	322	733 16 7
15	Manchester - -	—	—	114	186	1	301	691 5 10
16	Ditto - -	—	—	—	285	—	285	599 2 7
17	Ditto - -	—	—	259	—	10	269	470 19 11
18	Ditto - -	—	—	257	—	4	261	510 19 7
19	New Mills - -	—	36	83	169	7	259	594 16 9
20	Manchester - -	—	—	93	162	1	256	541 9 4
21	Disley - -	—	—	250	5	1	256	485 1 0
22	Oldham - -	38 to 42	40	196	57	—	253	452 18 10
23	Cheadle Bulkeley	40	40	213	—	3	216	379 10 10
24	Manchester - -	—	—	211	—	1	212	356 10 0
25	Ditto - -	—	—	176	31	1	208	348 10 11½
26	Ditto - -	36 to 40	38	194	—	5	199	434 4 10
27	Oldham - -	50 & 70	56.66	83	109	—	192	438 12 5½
28	Ditto - -	—	—	177	—	8	185	399 13 2
29	Manchester - -	—	—	173	—	1	174	303 7 8
30	Ditto - -	—	—	164	—	7	171	350 8 5
31	Ditto - -	—	—	172	—	1	173	303 2 6
32	Stockport - -	—	—	50	108	8	166	395 0 6
33	Duckenfield -	—	—	158	—	1	159	336 1 11
34	Ashton - -	—	—	114	45	—	159	329 4 3
35	Stockport - -	—	—	50	101	1	152	393 0 4
36	Manchester - -	—	—	146	—	1	147	240 0 0
37	Stockport - -	—	—	56	82	6	144	295 7 4
38	Bolton - -	60 to 130	95	141	—	1	142	268 18 3
39	Stockport - -	—	—	133	2	5	140	270 12 0
40	Brinnington -	—	—	115	—	8	123	297 14 6
41	Manchester - -	—	—	92	18	6	116	256 0 0

	Town or Place in or near which the Mills are situate.	Counts spun.	Average Counts spun.	Number of Persons engaged in preparing and spinning Cotton.	Number of Persons engaged in Weaving.	Number of Persons engaged as Engi-neers, Mechanics, Roller Coverers, etc.	Total Number of Persons employed.	Aggregate Net Earnings for the Month ending 4th May 1833.
42	Stayley Bridge -	100 to 170	135	110	—	4	114	£ s. d. 284 17 0½
43	Manchester -	—	—	109	—	3	112	245 9 4½
44	Stockport -	—	—	109	—	1	110	224 9 5
45	Manchester -	—	—	98	—	7	105	174 5 2½
46	Oldham -	—	—	69	29	—	98	201 12 4
47	Stockport -	—	—	62	34	1	97	240 15 7½
48	Duckenfield -	60 to 90	75	91	—	2	93	209 7 3
49	Stayley Bridge -	—	—	90	—	—	90	262 2 0
50	Oldham -	—	—	80	—	1	81	117 1 6
51	Bolton -	16, 20 & 28	21.33	63	16	1	80	160 5 0
52	Ditto -	110 to 150	130	80	—	—	80	151 4 7½
53	Manchester -	—	—	—	71	1	72	140 15 11
54	Oldham -	—	—	72	—	—	72	128 8 8
55	Ditto -	—	—	—	65	—	65	133 17 3
56	Werneth -	36 & 38	37	63	—	1	64	118 17 2
57	Manchester -	150 to 180	165	60	—	—	60	124 9 1
58	Hollingworth -	40	40	49	—	—	49	94 11 3
59	Glossop -	40	40	49	—	—	49	91 8 0
60	Stockport -	—	—	43	—	2	45	64 11 11
61	Glossop -	—	—	40	—	1	41	66 16 4
62	Hayfield -	—	40	39	—	1	40	100 15 2
63	Manchester -	—	—	—	39	—	39	77 6 8
64	Stockport -	20 to 24	22	35	—	—	35	61 19 8
65	Glossop -	—	—	33	—	—	33	64 17 3½
66	Hayfield -	—	—	29	—	—	29	45 16 10
67	Tintwistle -	—	—	23	—	—	23	54 1 8
68	Oldham -	—	—	20	—	—	20	39 5 0
69	Manchester -	—	—	—	16	—	16	26 15 2½
70	Stockport -	—	—	9	7	—	16	60 1 5
				10,029	7,650	318	17,997	38,538 18 4¾

COTTON MILLS.

LIST III. (NIGHT AND DAY MILLS.)

NOTICE.—Four mills appear to have worked at night, and the following are the results their returns exhibit :—

Town or Place in or near which the Mills are situate.	Hours during which the Mill worked.	Counts spun.	Average Counts.	Number of Persons engaged in preparing and spinning Cotton.	Number of Persons engaged in Weaving.	Number of Persons engaged as Engineers, Mechanics, Roller Coverers, etc.	Total Number of Persons employed.	Aggregate Net Earnings for the Month ending 4th May 1833.
Manchester { Water-mill Mule-mill	{ Day 276 Night 264	{ 16 to 42	{ Water 20 Mule 38	{ 361	15	12	388	£ s. d. 631 7 9
Warrington { Same	{ Day 246 Night 197	{ 14 to 45	33.1	167	—	1	386	699 0 10¾
Do. { Owners	—	—	—	—	215	3	197	389 19 7
Bolton -	537	70 to 130	100	197	—	—	197	404 0 1
Bolton - { Day hands Night hands	{ 68 per week 64¾ —	{ 70 to 90	80	202	—	4	206	
				927	230	20	1,177	2,124 8 3¼

SAMUEL STANWAY.

SUPPLEMENT (Y.) (GENERAL.)

Showing the Distribution of the 67,819 Hands (employed in the 225 Mills included in the THREE preceding LISTS) in the different Places mentioned, their Ages, Sex, &c. and the Aggregate NET Earnings of the whole Numbers at each Place realised by them, during the Month ending 4th May 1833; and other Particulars.

Place where employed.	Adults.		Children under Eighteen Years.						Total Number employed.	Aggregate Amount of their Net Earnings for the Month ending 4th May 1833.	Number paid by fixed daily Wages.	Number paid in proportion to the Quantity produced.	Number whose Mode of Payment is not given in Returns.	—	
	Males.	Females.	Males.			Females.									
			In the direct Employ of Masters.	In the direct Employ of Operatives.	Em- ployers uncer- tain.	In the direct Employ of Masters.	In the direct Employ of Operatives.	Em- ployers uncer- tain.							
Manchester and im- mediate neighbour- hood	5,847	7,624	1,734	2,803	63	2,592	1,640	59	22,442*	£ 45,164	s. 9	d. 5	11,690	9,178	1,574
Stockport and Heaton	2,601	2,525	660	1,027	28	976	541	38	8,396	18,405	5	9¼	3,470	4,764	162
Norris	2,551	2,421	347	976	9	859	358	25	8,542†	19,409	7	5½	2,693	3,827	2,022
Duckenfield & Stay- ley Bridge	2,802	3,507	1,076	832	51	1,921	180	13	10,382	23,397	16	10	2,409	6,637	1,336
Hyde, Brinnington, &c.	1,321	1,413	233	591	26	423	333	30	4,370	8,884	10	4½	1,796	1,917	657
Tintwistle, Glossop, &c.	1,954	1,388	310	882	40	694	389	38	5,695	11,467	9	9¾	2,672	2,806	217
Oldham	1,650	1,482	383	1,204	3	696	750	6	6,174	11,548	15	7	4,285	1,833	56
Bolton	334	355	65	150	—	110	88	—	1,102	2,019	4	6¼	348	539	215
Warrington	187	247	72	58	—	127	25	—	716	1,338	5	10½	250	449	17
One mill at Bury & one at Ashton	19,247	20,962	4,880	8,523	220	8,398	4,304	209	67,819	141,635	5	7¾	29,613	31,950	6,256
															67,819

* Including 80 whose ages and sex were not given in the returns.
† Including 996 whose ages and sex were not given in the returns.

SUPPLEMENT (Z.) (GENERAL.)

Distributing the 67,819 Hands into Eight different BRANCHES or DEPARTMENTS of Cotton-working, and shewing the Aggregate NET Earnings of the whole Number of Operatives in each Branch, realised by them during the Month ending 4th May 1833; and other Particulars.

Employed in	Adults.		Children under Eighteen Years.						Number of Persons whose Age and Sex are not given in Returns.	Total Number of Persons employed.	Aggregate Amount of their NET Earnings for the Month ending 4th May 1833.
	Males.	Females.	Males.			Females.					
			In the direct employ of Masters.	In the direct employ of Operatives.	Employers uncertain.	In the direct employ of Masters.	In the direct employ of Operatives.	Employers uncertain.			
Cleaning and spreading cotton - - }	424	739	303	1	10	110	2	4	—	1,593	£ 2,750 19 11
Carding - -	3,302	4,800	1,588	147	25	2,581	146	52	261	12,902	23,990 9 10½
Mule-spinning - -	7,243	1,656	968	7,532	82	400	2,761	26	116	20,784	44,509 13 9¼
Throstle-spinning - -	253	956	449	8	32	702	6	51	—	2,457	3,701 16 10
Reeling - -	230	3,572	58	8	—	735	24	38	—	4,665	7,271 17 5½
Weaving - -	6,514	9,104	1,460	823	65	3,859	1,358	38	699	23,920	53,752 17 5¼
Roller covering - -	83	124	6	1	—	10	7	—	—	231	562 9 6½
And as engineers, mechanics, firemen, &c. - - }	1,198	11	48	3	6	1	—	—	—	1,267	5,095 0 9¾
	19,247	20,962	4,880	8,523	220	8,398	4,304	209	1,076	67,819	141,635 5 7¼

CALCULATION of the TOTAL NUMBER of PERSONS employed in COTTON MILLS in ENGLAND.

The subsequent calculation does not aim at fixing the whole number of operatives dependent upon the Cotton trade for subsistence, but only of that part of the operative body which earns a livelihood in Cotton Factories *moved by power*, and is employed in carrying on the preparing, spinning, weaving, and accessory mechanical departments within the walls of them.

It does not comprehend hand-loom weavers, printers, bleachers, dyers, cotton-thread lace-makers, (an enormous and growing branch of the Cotton Manufacture,) and many other branches of manufacture either arising out of, or immediately dependent upon, the spinning of cotton by power. It comprehends those operatives alone who habitually work in Cotton Factories. It shows their body to consist of 212,800 persons, and to earn annually the enormous sum of £5,777,434. 14. 1.

CALCULATION.

The total quantity of Cotton consumed in the spinning of Yarn in Great Britain in 1832, as stated in Burn's "Commercial Glance," was 277,260,490 lbs., and of this quantity 27,327,120 lbs. was consumed in Scotland, leaving for the consumption of England 249,933,370 lbs.*

The net loss of Cotton in spinning is estimated variously by different individuals. In the Calculations of Mr. Kennedy, made use of by him in a paper published in the "Transactions of the Manchester Literary and Philosophical Society," it is taken at $1\frac{1}{2}$ oz. per lb.; whilst Montgomery, in his "Theory and Practice of Cotton Spinning," computes it at $1\frac{1}{3}$ oz., and Burn at $1\frac{3}{4}$ oz.; but as the amount taken by Mr. Kennedy is that which appears to be generally considered correct, it is adopted in these Calculations.

If, then, from the quantity of cotton given above we deduct $1\frac{1}{2}$ oz. per lb., or 23,431,253 lbs., we shall have the total weight of yarn produced 226,502,117 lbs.

The average number of hanks in each pound of yarn spun is considered, by apparently a majority of persons conversant with the subject, to be 40. Montgomery takes the average counts spun in Great Britain at 50^s, which, taking into account the finer average numbers spun in Scotland than in England, would fix the counts nearly as above stated.

The returns made to the Lancashire Forms of Inquiry, as given in the previous tables, show an average of finer counts than 40^s; but as the Returns were better made from the fine mills than from the coarse, and from Manchester, where the finer yarn is spun, than from the country, it is evident that lower numbers ought to be taken than those shown in the returns; and as the general opinion appears to be in favour of 40^s, this average is adopted.

Three mills, in different situations, and of Average Capabilities†, made a return of the quantity produced by them in the month ending the 4th May 1833; and as the average counts of the whole were 39.98 hanks to the lb., and as they also gave the number of the hands employed in spinning during that month, and the duration of their labour, they furnished data from which may be easily calculated the total number employed in factories in England in preparing and spinning cotton.

* I refer to general opinion at Liverpool and Manchester for the authority due to Burn's "Commercial Glance."

† It is perhaps hardly necessary to point out, after what I have said in my Preface to these Tables, that this Calculation depends very much upon the three mills being of "Average Capabilities."

In the mill of the first, 344 persons in the spinning department, working 276 hours, produced
 18,000 lbs. of 30^s @ 32^s.
 18,000 lbs. of 38^s @ 42^s.
 2,400 lbs. of 150^s @ 170^s.

In the second mill, 245 hands, working 270 hours, produced
 1,795 lbs. of 12^s.
 4,285 lbs. of 22^s.
 33,838 lbs. of 40^s.

And in the third, 110 hands, working 286 hours, produced
 16,700 lbs. of 40^s.

The average counts of the three being, as before stated, 39.98, and the produce 95,018 lbs.

The total number of hours worked will, therefore, be $\frac{344 \times 276 + 245 \times 270 + 110 \times 286}{192,554} = 49,346$ lbs.

The usual estimate of 300 working days per annum of $11\frac{1}{2}$ hours each, or 69 hours per week, would give $49,346 \times 11.5 \times 300 = 1,702,437$ lbs., the produce of each person per annum, and $\frac{226,502,117}{1,702,437} = 133,045$ the number of persons employed in the preparation and spinning of cotton in England.

On an examination of Supplement (Z.), it will be seen that in the 67,819 persons, of whom returns were made to the Commission, there were 42,401 engaged in preparing and spinning cotton, 23,920 in the weaving department, and 1,498 as engineers, mechanics, roller-coverers, &c.

If then the same proportions are taken as existing in the total number of cotton-workers which are found in the returns made to the Lancashire Forms of Inquiry, the number of persons engaged in the manufacture of cotton cloth in factories will be 75,055, and of those employed as engineers, &c. 4,700; making with the 133,045 in the spinning department a general total of 212,800 persons engaged in cotton factories.

Which total number of 212,800 persons may be divided and distributed, by adopting the proportions given in the Returns made to the Lancashire Forms of Inquiry, so as to show the probable number of persons employed in each of the Eight Branches or Departments of Cotton-working, and the aggregate amount of their NET Earnings per month.

Employed in	Adults.		Children under Eighteen Years of Age.						Proportion whose Age and Sex are uncertain from a Deficiency in the Returns.	Total Number employed.	Aggregate Amount of Monthly Net Earnings.
	Males.	Females.	Males.			Females.					
			In the direct Employ of Master.	In the direct Employ of Operative.	Em- ployer un- certain.	In the direct Employ of Master.	In the direct Employ of Operative.	Em- ployer un- certain.			
Cleaning & spread- ing cotton - }	1,330	2,319	951	3	31	345	6	13	- -	4,998	£ 8,631 19 6
Carding - - -	10,361	15,062	4,983	461	78	8,099	458	163	819	40,484	75,276 10 0
Mule spinning -	22,727	5,196	3,038	23,634	257	1,255	8,663	82	364	65,216	139,660 17 9
Throstle spinning -	793	3,000	1,409	25	100	2,203	19	160	- -	7,709	11,615 10 1
Reeling - - -	722	11,208	182	25	- -	2,306	76	119	- -	14,638	22,817 8 4
Weaving - - -	20,440	28,566	4,581	2,582	204	12,109	4,261	119	2,193	75,055	168,663 16 3
Roller covering -	261	389	19	3	- -	31	22	- -	- -	725	1,764 18 5
As Engineers, Me- chanics, &c. - }	3,759	34	151	9	19	3	- -	- -	- -	3,975	15,987 0 9
	60,393	65,774	15,314	26,742	689	26,351	13,505	656	3,376	212,800	444,481 1 1

In Supplement (D.) is given the proportionate number of children, male and female, employed in Factories, between fourteen and eighteen years of age, and below fourteen; it is therefore easy to ascertain the probable number of children under fourteen.

It there appears that the boys under fourteen are to the boys between fourteen and eighteen as 12.21 to 8.95, and the girls as 9.46 to 10.67; if therefore these proportions are applied to the 42,745 males and 40,512 females under eighteen, above given, we shall have —

Under

Under 14,	-	-	24,665 Males.
			19,038 Females.
Between 14 and 18,			18,080 Males.
			21,474 Females.
			<u>83,257</u>

If the School Returns be then referred to, it will be seen that the proportions are there given of children working in factories of all the ages under fourteen; and it is therefore possible to calculate, with a considerable degree of accuracy, the number of children of each age.

In 5,400 males working in factories under fourteen, it will be seen that there are

7 males of 5 years of age, and under 6				
19	-	6	-	7
64	-	7	-	8
180	-	8	-	9
657	-	9	-	10
1,089	-	10	-	11
1,141	-	11	-	12
1,147	-	12	-	13
1,096	-	13	-	14
<u>5,400</u>				

In 5,001 females working in factories under fourteen, it will be seen that there are

6 females of 6 years of age, and under 7				
77	-	7	-	8
183	-	8	-	9
496	-	9	-	10
905	-	10	-	11
1,007	-	11	-	12
1,218	-	12	-	13
1,109	-	13	-	14
<u>5,001</u>				

Adopting these proportions there will be,

In the 24,665 boys under fourteen, working in cotton factories,

32 of 5 years of age, and under 6				
87	-	6	-	7
292	-	7	-	8
822	-	8	-	9
3,001	-	9	-	10
<u>4,234</u>				
4,974	-	10	-	11
5,212	-	11	-	12
5,239	-	12	-	13
5,006	-	13	-	14
<u>20,431</u>				
<u>24,665</u>				

In the 19,038 girls under fourteen, working in cotton factories,

23 of 6 years of age, and under 7				
293	-	7	-	8
697	-	8	-	9
1,888	-	9	-	10
<u>2,901</u>				
3,445	-	10	-	11
3,833	-	11	-	12
4,637	-	12	-	13
4,222	-	13	-	14
<u>16,137</u>				
<u>19,038</u>				

And on reference to the average earnings of children of both sexes in Cotton Factories, as ascertained by the Commissioners in their personal inquiries at the Sunday-schools in Manchester and Stockport, and given in the First Report of the Commission, (D. 1. page 88.) taking the children under nine years of age at the lowest average rate, it will be seen that the following will be the totals of their net earnings per month:—

		£	s.	d.
4,234 Boys earning at the rate of 30.11d. per week		2,124	15	3
4,974	-	37.85d.	3,137	15 3½
5,212	-	47.84d.	4,155	14 0½
5,239	-	52.57d.	4,590	4 8¾
5,006	-	64.39d.	5,372	5 5¼
<u>24,665</u>			<u>£19,380</u>	<u>14 8¾</u>
		£	s.	d.
2,901 Girls	-	34.41d.	1,663	14 5½
3,445	-	41.41d.	2,377	12 5¾
3,833	-	45.96d.	2,936	1 6½
4,637	-	54.88d.	4,241	6 2¼
4,222	-	68.86d.	4,872	19 10¼
<u>19,038</u>			<u>£16,091</u>	<u>14 6¼</u>

From which it will appear that the NET Earnings of the above children under thirteen will be £25,227 3s. 11½d. per month; but as the amount of net earnings per week was given by the children for a full week, the above amount is to be taken as for twenty-four working days. The NET Earnings per annum of 300 working days will be £315,339 19s. 5¾d.

(D. 1.)

Z b 3

ADDENDUM.

And in like manner the NET Earnings of the total number of children under fourteen years of age, consisting of 24,665 boys and 19,038 girls, and amounting to £35,472 9s. 3d. per month, will be £443,405 15s. 7d. per annum.

Upon this Calculation there exists a check in the Returns made by the masters of the NET Earnings of children under fourteen, and a summary of which will be found in Supplement C., from which it will appear that their average NET Earnings in the month ending 4th May 1833 were 46.35 pence per week, which being considered as the earnings of an average week *, will give an amount per annum of £438,887 7s. 6d.

The total net earnings per annum of the whole estimated number of 212,800 persons will be £5,777,434 14s. 1d.

And since the proprietors of the mills included in the three lists previously given, employing 67,819 hands, as shown in Supplement Z., employ also 183 persons in the counting-houses and 1,147 in the warehouses (within the mills), adopting these proportions, there will be employed, with reference to the total number of 212,800 persons engaged in factories, an additional number of 574 clerks and 3,599 warehouse hands.

SAM. STANWAY.

* By "average week" is meant one of a month which contains an average number of holidays, and one which therefore has not to be taken into account as containing six days out of 300 working days, but one fifty-second part of a year.

A child, on being asked at the Sunday-schools, personally, by the Commissioners and their clerks, the amount of its earnings per week, replied, doubtless, for a full week, and this has therefore to be calculated as six three-hundredths of the year;—whilst the Returns of the Masters embrace a period of the year which contains a proportion of the holidays (as nearly as can be imagined an *average* portion), and is to be taken as one week of the fifty-two, or as six three hundred and twelfths of the year.

Manchester, 20th May 1833.

FACTORY COMMISSION,

YORK HOTEL, KING STREET.

SILK MILL. (Specimen of Return from.)

THE COMMISSIONERS appointed by HIS MAJESTY for enquiring as to the EMPLOYMENT OF CHILDREN IN FACTORIES, IN THE MANUFACTURING DISTRICTS OF GREAT BRITAIN, request from you immediate replies to the following QUESTIONS, with reference to the persons in your employment. You are desired to set down nothing therein which you are not prepared, as far as your knowledge extends, to verify on Oath, if required so to do by any of HIS MAJESTY'S Commissioners.

NOTICE.

If there are any other descriptions of hands in your employ than those specified in the Schedule, you are requested to specify the same; and to state the particulars regarding them, in the manner indicated in the Schedule. The return of each department is to be authenticated by the signature of the person or persons employed by you to pay the hands in that department.

The COMMISSIONERS request that this paper may be returned at their office, as above, with the least possible delay; and in case you should require more than four days, including the one on which you receive this, for making your return, they further request that you will immediately apprise them of the circumstance, and of the reasons for it.

You are also requested to make your answers in duplicate, and to place one copy in one of the rooms frequented by the persons in your employment, so that they may have an opportunity of inspecting them during one whole day.

- 1.—State the number of persons employed in your }
counting-house establishment - - - }
- 2.—State the number of persons employed by you in } 2
your warehouse establishment - - - }
- 3.—State the number of persons employed by you, } 1 engineer.
exclusive of those in your counting-house and } 86 throwing hands.
warehouse - - - - - } 177 winding or weaving hands.
- 4.—State the total number of persons employed by }
you - - - - - } 276
- *5.—State the total amount of wages paid by you to } £ 89 12 7 wages of the former.
the whole number of hands, specified in your } 275 16 4 wages of the latter.
Answer to Question 3, during the month ending }
Saturday, May 4th, 1833 - - - - - } £ 365 8 11
- 6.—Give the particulars required in the Schedule }
overleaf - - - - - }

* Your pay-day is assumed to be Saturday. If it should happen to be on any other day of the week, you are requested to answer No. 3. Question, and likewise to fill up the annexed schedule with reference to the month ended on your first pay-day in May 1833.

FACTORY COMMISSION :

<i>E. Mill.</i>	Whether Adults or not ; i. e. whether or not under 18.				Total No.	Total Net Amount of Earnings for each Week in the month ending 4th May.*								Whether working by the Piece.	Whether in direct Employ of Master or Operative.				
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.			2d Week.			3d Week.				4th Week.			
						£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.		
Overlookers - -	4	—	—	—	4	3	12	0	3	12	0	3	12	0	3	12	0	No.	Master.
Danters - -	—	4	—	—	4	1	7	10	1	14	3	1	14	2	1	4	5	—	—
Winders - -	—	—	23	24	47	5	10	9	6	9	7	6	14	0	5	17	9	—	—
Cleaners - -	—	—	2	5	7	1	12	2	1	15	9	2	1	9	1	18	7	—	—
Drawers or Poppeters	None	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Doublers - -	—	8	—	3	11	3	0	0	4	6	1	5	17	7	2	2	6	—	—
Throwers - -	4	—	9	—	13	4	15	10	5	11	3	6	5	1	5	5	3	—	—
Reelers - -	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Makers-up of Hanks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	8	12	34	32	86	19	18	7	23	8	11	26	4	7	20	0	6		
															26	4	7		
															23	8	11		
															19	18	7		
															89	12	7		

Signature of person or persons
by whom the above hands
were paid

..... J. S.

in the employ of C. & D.

WEAVING.

<i>E. Mill.</i>	Whether Adults or not ; i. e. whether or not under 18.				Total No.	Total Net Amount of Earnings for each Week in the month ending 4th May.*								Whether working by the Piece.	Whether in direct employ of Master or Operative.				
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.			2d Week.			3d Week.				4th Week.			
						£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.		
Overlooker -	6	—	—	—	6	5	9	0	5	9	0	5	9	0	5	9	0	No.	Master.
Winding - -	—	6	—	1	7	1	13	10	2	2	7	2	8	5	2	8	10	—	—
Warping - -	1	28	—	5	34	13	11	4	16	3	4	16	2	2	14	13	9	—	—
Weaving - -	15	10	38	8	71	19	7	5	26	13	8	29	17	3	27	10	11	—	—
Twister-in -	—	1	—	—	1	0	13	0	0	13	0	0	13	0	0	13	0	—	—
Enterer - -	—	—	—	1	1	0	5	7	0	7	6	0	7	4	0	6	3	—	—
Server - -	—	—	1	—	1	0	3	4	0	4	6	0	4	6	0	3	9	—	—
Dyed or Soft Silk winding for Weavers - -	—	14	—	42	56	15	4	7	22	14	10	18	10	11	20	1	9	—	—
	22	59	39	57	177	56	8	1	74	8	5	73	12	7	71	7	3		
															73	12	7		
															74	8	5		
															56	8	1		
															275	16	4		

Signature of person or persons
by whom the above hands
were paid

B. B.
T W.

* See note on previous page referring to Question 5.

OTHER MANAGERS, OVERLOOKERS, AND BOOK-KEEPERS.

Are they paid by a fixed salary, or according }
to the quantity of work turned out?

Name and Signature of Answerer.

Manchester, 20th June 1833.

FACTORY COMMISSION,

YORK HOTEL, KING STREET.

SILK MILL. (Specimen of Return from.)

THE COMMISSIONERS appointed by HIS MAJESTY for ENQUIRING AS TO THE EMPLOYMENT OF CHILDREN IN FACTORIES, in the manufacturing districts of Great Britain, request from you immediate replies to the following Questions, and they further request that this paper may be returned at their office, as above, with the least possible delay; and that in case you should require more than four days, including the one on which you receive this, for making your return, that you will immediately apprise them of the circumstance, and of the reasons for it.

You are also requested to cause copies of the answers to be made, and placed in one of the rooms frequented by the persons in your employment, so that they may have an opportunity of inspecting them during one whole day.

- 1.—State the number of hours which your mill was at work during the month ending the 4th May, or during the period for which you have made your return - - - - - } 251
- 2.—State the total amount of net earnings paid during the aforesaid period to all the persons in your employ under the age of fourteen - - } £59 2 5
- 3.—Fill up the annexed form showing the total number of children under fourteen years of age employed by you - - - - - } 75

CHILDREN UNDER 14 YEARS OF AGE.

Employment.	Males.	Females.	Total.	Whether in direct employ of Master or Operative.*
Danters - - - - -	—	—	—	—
Winders - - - - -	32	37	69	M.
Cleaners - - - - -	1	2	3	—
Drawers or Poppeters - - - - -	—	—	—	—
Doublers - - - - -	—	—	—	—
Throwers - - - - -	3	—	3	M.
Reelers - - - - -	—	—	—	—
Warpers - - - - -	—	—	—	—
If there are any other descriptions of Hands in your employ, under 14 years of age, you are requested to specify the same.				
Total - - -	36	39	75	

* In stating your replies the letters M. and O. may be used to signify "Masters and Operatives."

Name and Signature of Answerer..... S. S.

SILK MILLS.

LIST I. (Comprehending 18 Mills from which COMPLETE Returns were made.)

TABLE extracted from the RETURNS to the Tabular Forms issued at MANCHESTER on the 20th May and 20th June 1833.

	Town or Place in or near which the Mills are situated.	Hours during which the Mill worked in the Month ending May 4, 1833.	Number of Persons engaged in the Throwing Department.	Number of Persons engaged in the Weaving Department.	Number of Persons engaged as Engineers, Mechanics, &c.	Total Number employed.	Total NET Earnings realised by the Total NUMBER of Persons given in the preceding Column during the Month ending 4th May 1833, and for working the Number of Hours given in the Third Column.	Average Weekly Net Earnings of each Indi- vidual, calcu- lated for 69 Hours.
1 a	Macclesfield -	278	571	218	—	1,161	£ s. d.	Pence.
1 b	Congleton -	260	321	51			1,476 7 4½	74.11
2 a	Macclesfield -	278	243	—	—	953	1,061 15 7	67.35
2 b	Ditto -	280	205	—				57.72
2 c	Ditto -	266	143	—				53.86
2 d	Ditto -	293	94	—				55.37
2 e	Ditto -	251	86	177				91.67
Same Owners.								
3	Manchester -	288	538	15	—	553	587 14 1	61.10
4	Ditto -	270	473	10	6	489	508 6 4	65.75
5	Congleton -	284	189	142	7	338	536 0 1	92.46
6	Macclesfield -	278	181	69	1	251	305 14 7½	72.55
7	Manchester -	271	130	88	1	219	245 14 4½	68.56
8	Congleton -	245	200	—	5	205	185 15 2½	61.24
9	Manchester -	256	188	10	2	200	289 16 10	93.74
10	Congleton -	273	174	—	—	174	160 14 2½	56.02
11	Ditto -	284	79	73	3	155	197 7 7	74.25
12	Ditto -	252	114	—	2	116	117 13 3	66.65
13	Ditto -	249	112	—	2	114	118 3 8	68.94
14	Ditto -	255	107	—	3	110	98 8 1½	58.09
15	Ditto -	272	75	—	6	81	97 1 1	72.94
16	Ditto -	259	65	—	2	67	66 4 8	63.20
17	Ditto -	269.3	40	—	—	40	39 9 6	60.68
18	Ditto -	269.3	34	—	—	34	34 5 0	61.94
			4367	853	40	5,260	6,126 11 7	

SAM'L STANWAY.

SUPPLEMENT (A.) (GENERAL.)

Showing the Distribution of the 5,260 Hands (employed in the 18 mills given in the preceding LIST) in the different Places mentioned, their Ages, Sex, &c. the Aggregate NET Earnings of the whole Number, and the Average NET Earnings of an individual, in each place, for 69 hours work.

Place of Employment.	Adults.		Children under Eighteen Years of age.		Total Number employed.	Aggregate Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Total Amount of their Net Earnings for the Month ending 4th May 1833.	Average Net Earnings per Week of each Individual, calculated for 69 Hours.
	Males.	Females.	Males.	Females.					
Manchester - - -	160	300	347	654	1,461	401,843	275.0	£ s. d. 1,631 11 7½	Pence. 67.23
Macclesfield - - -	202	407	450	934	1,993	547,057	274.4	2,349 4 7	71.11
Congleton - - -	397	330	348	731	1,806	479,440.2	265.4	2,145 15 4½	74.11
	759	1,037	1,145	2,319	5,260	1,428,340.2	271.5	6,126 11 7	71.03

(D. 1.)

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FACTORY COMMISSION:
SUPPLEMENT (B.) (GENERAL.)

Distributing the 5,260 Hands into Three BRANCHES of Silk-working and showing the Aggregate NET Earnings of the whole Number of Operatives in each BRANCH, and the Average NET Earnings of an Operative in each, for 69 hours work.

Employed in	Adults.		Children under Eighteen Years of Age.		Total Number employed.	Aggregate Number of Hours worked by them. during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Total Amount of their Net Earnings for the Month ending 4th May 1833.			Average NET Earnings per Week of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.	Females.							
Throwing - - -	394	768	1,075	2,130	4,367	1,185,716.2	271.5	£	s.	d.	Pence.
Weaving - - -	325	269	70	189	853	231,961	271.9	4,440	0	0½	62.01
As engineers, mechanics, &c.	40	—	—	—	40	10,663	266.5	1,556	9	7½	111.11
								130	1	11	202.04
	759	1,037	1,145	2,319	5,260	1,428,340.2	271.5	6,126	11	7	71.03

SUPPLEMENT (C.) (GENERAL.)

Showing the Total Number of Children under 14 years of age (comprehended in the total Number of 5,260) and their Aggregate Net Earnings for the Month ending 4th May 1833.

Place of Employment.	Persons Eighteen Years of Age and upwards.			Persons above Fourteen and under Eighteen.			Children under Fourteen.					
	Males.	Females.	Total Number.	Males.	Females.	Total Number.	Males.	Females.	Total Number.	Aggregate NET Earnings of the whole Number of Children for the Month ending 4th May 1833.		
Manchester - - -	160	300	460	59	308	367	288	346	634	£	s.	d.
Macclesfield - - -	202	407	609	137	427	564	313	507	820	316	10	7
Congleton - - -	397	330	727	79	322	401	269	409	678	569	17	10½
	759	1,037	1,796	275	1,057	1,332	870	1,262	2,132	393	5	7
										1,279	14	0½

SUPPLEMENT (D.) (GENERAL.)

The 5,260 Hands exhibit the following Proportions in 100, of Persons above 18 years of Age, of Persons above 14 and under 18, and of Children under 14. The Proportions of the Sexes of each age are likewise exhibited.

Place of Employment.	Adults.		Children between Fourteen & Eighteen Years of Age.		Children under Fourteen.		Total Adults.	Total Non-adults.	Total Males.	Total Females.
	Males.	Females.	Males.	Females.	Males.	Females.				
Manchester - - -	10.95	20.54	4.04	21.08	19.71	23.68	31.49	68.51	34.70	75.30
Macclesfield - - -	10.14	20.42	6.87	21.43	15.70	25.44	30.56	69.44	32.71	67.29
Congleton - - -	21.98	18.27	4.37	17.83	14.90	22.65	40.25	59.75	41.25	58.75
	14.43	19.71	5.23	20.10	16.54	23.99	34.14	65.86	36.20	63.80

SUPPLEMENT (E.) GENERAL.)

Shewing the Average NET Earnings of different Operatives employed in the two PROCESSES of Throwing and Weaving in the Districts specified in Supplement (C.)

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Total Number of Persons employed.	Total Number of Hours worked by them, during the Month ending 4 May 1833.	Average Number of Hours worked by each.	Aggregate Net Earnings for the Month ending 4th May 1833.			Average Weekly NET Earnings of each Individual, in each PROCESS, calculated for 69 Hours.
Throwing	Overlookers -	Male adults - - -	105	28,570	272.0	£	s.	d.	Pence.
	Danters -	Female adults and non-adults -	126	34,156	271.0	327	15	7	189.99
	Winders -	Chiefly female non-adults -	1,910	518,318	271.3	1,239	13	1	87.19
	Throwers -	Male adults and non-adults -	448	121,591	271.4	707	5	1½	39.60
Weaving	Overlookers -	Male adults - - -	15	4,016	267.7	56	16	4	96.32
	Winders -	Female adults and non-adults -	329	91,837	279.1	56	16	4	234.28
	Warpers -	Male and female adults -	105	28,304	269.5	445	9	8	80.32
	Weavers -	Principally male adults -	322	87,291	271.0	272	9	7½	159.42
						644	7	6	122.24

SUPPLEMENT (F.) (GENERAL.)

Showing the Average NET Earnings per Week of 69 Hours, of Operatives employed in the three different BRANCHES of Silk-working in the under-mentioned Places.

		Manchester.	Macclesfield.	Congleton.	Total.
Employed		<i>Pence.</i>	<i>Pence.</i>	<i>Pence.</i>	<i>Pence.</i>
	In Throwing -	59.17	62.44	64.16	62.01
	In Weaving -	142.05	100.43	115.06	111.11
	As engineers, me- chanics, &c. -	254.10	152.89	188.08	202.04
		67.23	71.11	74.11	71.03

SUPPLEMENT (G.) (GENERAL.)

Showing the Average Net Earnings per Week of 69 hours of different Classes of Operatives employed in the Two PROCESSES of Throwing and Weaving in the under-mentioned Districts.

Denomination of Process in which employed.		Class of Operatives.	Manchester.	Macclesfield.	Congleton.	Total.
Throwing -	{	Overlookers -	<i>Pence.</i> 204.57	<i>Pence.</i> 215.77	<i>Pence.</i> 159.22	<i>Pence.</i> 189.99
		Danthers -	89.94	93.40	79.93	87.19
		Winders -	39.25	37.30	42.62	39.60
		Throwers -	100.51	95.07	95.40	96.32
Weaving -	{	Overlookers -	239.42	232.88	233.23	234.28
		Winders -	81.78	82.89	60.23	80.32
		Warpers -	241.78	117.62	167.15	159.42
		Weavers -	87.58	109.97	141.21	122.24

SUPPLEMENT (H.) (LOCAL.)

Distributing the 1,461 Operatives employed at MANCHESTER, and concerning whom COMPLETE Returns were obtained, into the three BRANCHES of Silk-working specified in General Supplement (B.), and exhibiting similar Returns.

Employed in	Adults.		Children under 18 Years of Age.		Total Number.	Aggregate Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Total Amount of Net Earnings for the Month ending 4th May 1833.	Average NET Earnings per Week of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females	Males.	Females.					
Throwing - - -	76	269	343	641	1,329	366,012	275.4	£ 1,307 19 0½	<i>Pence.</i> 59.17
Weaving - - -	75	31	4	13	123	33,428	271.7	286 15 1½	142.05
As engineers, mechanics, &c.	9	—	—	—	9	2,403	267.0	36 17 5½	254.10
	160	300	347	654	1,461	401,843	275.0	1,631 11 7½	67.23

SUPPLEMENT (I.) (LOCAL.)

Showing the Average NET Earnings of different Classes of Operatives employed in the Two PROCESSES of Throwing and Weaving at MANCHESTER for 69 Hours work.

Denomination of Process in which employed	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Number of Hours worked, during the Month ending 4 May 1833.	Average Number of Hours worked.	Aggregate Amount of Net Earnings for the Month ending 4th May 1833.	Average NET Earnings per Week of each Individual, in each PROCESS, calculated for 69 Hours.
Throwing -	{	Male adults - - -	19	5,296	278 7	£ 65 8 5½	<i>Pence.</i> 204.57
		Female adults and non-adults -	25	6,934	277.3	37 13 2½	89.94
		Chiefly female non-adults -	561	154,735	275.8	366 16 8	39.25
		Male adults and non-adults -	92	25,170	273.5	152 15 7½	100.51
Weaving -	{	Male adults - - -	3	830	276.6	12 0 0	239.42
		Female adults and non-adults -	116	32,626	281.2	161 2 7	81.78
		Male adults - - -	33	9,188	278.4	134 3 0½	241.78
		Male adults - - -	32	8,672	271 0	45 17 4	87.58

SUPPLEMENT (K.) (LOCAL.)

Distributing the 1,993 Operatives employed at MACCLESFIELD, and concerning whom COMPLETE Returns were obtained into the three BRANCHES of Silk-working specified in General Supplement (B.), and exhibiting similar Results.

Employed in	Adults.		Children under Eighteen Years of Age.		Total Number.	Aggregate Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Total Amount of Net Earnings for the Month ending 4th May 1833.	Average Net Earnings per Week of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.	Females.					
Throwing - - -	124	215	411	778	1,528	422,566	276.5	£ s. d. 1,593 6 8	Pence. 62.44
Weaving - - -	77	192	39	156	464	124,213	267.7	753 6 7	100.43
As engineers, mechanics, &c.	1	—	—	—	1	278	278	2 11 4	152.89
	202	407	450	934	1,993	547,057	274.4	2,349 4 7	71.11

SUPPLEMENT (L.) (LOCAL.)

Showing the Average NET Earnings of different Classes of Operatives employed in the two PROCESSES of Throwing and Weaving at MACCLESFIELD for 69 hours work.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Aggregate Number of Hours worked, during the Month ending 4 May 1833.	Average Number of Hours worked.	Aggregate Amount of Net Earnings for the Month ending 4th May 1833.	Average NET Earnings per Week of each Individual, in each PROCESS, calculated for 69 Hours.
Throwing	Overlookers - -	Males adults - - -	41	11,297	275.5	£ s. d. 147 4 0	Pence. 215.77
	Daners - - -	Female adults and non-adults - -	48	13,248	276.0	74 14 5	93.40
	Winders - - -	Chiefly female non-adults - -	711	196,280	276.0	442 3 7½	37.30
	Throwers - - -	Half male adults and half male non-adults - -	186	51,481	276.7	295 11 7	95.07
Weaving	Overlookers - -	Male adults - - -	10	2,618	261.8	36 16 4	232.88
	Winders - - -	Female adults and non adults - -	182	50,407	276.9	252 6 7	82.89
	Warpers - - -	Principally female adults - -	69	18,264	264.7	129 14 7	117.62
	Weavers - - -	Male and female adults and non-adults - -	144	38,115	264.6	253 2 3	109.97

SUPPLEMENT (M.) (LOCAL.)

Distributing the 1,806 Operatives employed at CONGLETON, and concerning whom COMPLETE Returns were obtained, into the three BRANCHES of Silk-working specified in General Supplement (B.), and exhibiting similar Results.

Employed in	Adults.		Children under Eighteen Years of Age.		Total Number.	Aggregate Number of Hours worked by them, during the Month ending 4th May 1833.	Average Number of Hours worked by each.	Total Amount of Net Earnings for the Month ending 4th May 1833.	Average NET Earnings per Week of each Individual, in each BRANCH, calculated for 69 Hours.
	Males.	Females.	Males.	Females.					
Throwing - - -	194	284	321	711	1,510	397,138.2	263.0	£ s. d. 1,538 14 4	Pence. 64.16
Weaving - - -	173	46	27	20	266	74,320.0	279.3	516 7 11	115.06
As engineers, mechanics, &c.	30	—	—	—	30	7,982.0	266.0	90 13 1½	188.08
	397	330	348	731	1,806	479,440.2	265.4	2,145 15 4½	74.11

SUPPLEMENT (N.) (LOCAL.)

Showing the Average NET Earnings of different Classes of Operatives employed in the Two PROCESSES of Throwing and Weaving at CONGLETON for 69 hours work.

Denomination of Process in which employed.	Class of Operatives.	Classification as respects Sex and Age.	Number of Persons employed.	Aggregate Number of Hours worked by them, during the Month ending 4 May 1833.	Average Number of Hours worked by each.	Aggregate Amount of their Net Earnings for the Month ending 4th May 1833.	Average NET Earnings per Week of each Individual, in each PROCESS, calculated for 69 Hours.
Throwing	Overlookers - -	Male adults - - -	45	11,977	266.1	£ s. d. 115 3 1½	Pence. 159.22
	Daners - - -	Female adults - - -	53	13,974	263.6	67 9 1	79.93
	Winders - - -	Chiefly female non-adults - -	638	167,303	262.2	430 12 9½	42.62
	Throwers - - -	Male adults and non-adults - -	170	44,940	264.3	258 17 11	95.40
Weaving	Overlookers - -	Male adults - - -	2	568	284.0	8 0 0	233.23
	Winders - - -	Female adults and non-adults - -	31	8,804	284.0	32 0 6	60.23
	Warpers - - -	Male adults - - -	3	852	284.0	8 12 0	167.15
	Weavers - - -	Principally male adults - -	146	40,504	277.4	345 7 11	141.21

SILK MILLS.

LIST II.

NOTICE.—The owners of the following nineteen mills having made Returns which are incomplete as respects the number of hours worked during the month ending 4th May 1833, they were not included in the First list of Silk Mills, but are here given, for the reasons stated in the list of rejected Cotton Mills.

	Town or Place in or near which the Mills are situated.	Engaged in the Throwing Department.	Engaged in the Weaving Department.	Engaged as Engineers, Mechanics, &c.	Total Number employed.	Total Net Earnings for the Month ending 4th May 1833.
						£ s. d.
1	Macclesfield - -	296	122	—	418	497 16 0
2	Ditto - -	288	—	2	290	254 2 1½
3	Manchester - -	111	68	2	181	280 15 3
4	Macclesfield - -	170	—	—	170	160 13 1
5	Congleton - -	156	—	5	161	146 9 11½
6	Ditto - -	52	100	1	153	225 15 8½
7	Macclesfield - -	99	—	—	99	95 19 7
8	Ditto - -	98	—	—	98	98 0 0
9	Ditto - -	91	—	—	91	83 3 0
10	Congleton - -	76	—	—	76	72 16 0
11	Macclesfield - -	75	—	—	75	69 14 6
12	Ditto - -	72	—	—	72	69 14 7
13	Congleton - -	65	—	3	68	76 14 7
14	Macclesfield - -	64	—	—	64	65 18 6
15	Congleton - -	46	—	—	46	51 0 0½
16	Macclesfield - -	43	—	—	43	51 18 8
17	Ditto - -	33	—	—	33	26 8 5½
18	Ditto - -	29	—	—	29	32 7 11½
19	Ditto - -	—	21	—	21	36 3 6
		1,864	311	13	2,188	2,395 11 6

SUPPLEMENT (O.) (GENERAL.)

Showing the DISTRIBUTION of the 7,448 Hands (employed in ALL THE MILLS included in the Two preceding Lists) in the different Places, their Ages and Sex, and their Aggregate Net Earnings for the Month ending 4th May 1833.

Employed in	Adults.		Children under Eighteen Years.		Total Number employed.	Aggregate Net Earnings for the Month ending 4th May 1833.	Number paid by fixed Daily Wages.	Number paid in proportion to Work produced.	Number whose Mode of Payment is not given in Returns.
	Males.	Females.	Males.	Females.					
Manchester - -	182	357	363	740	1,642	£ s. d. 1,912 6 10½	1,165	259	218
Macclesfield - -	359	711	890	1,536	3,496	3,891 4 6½	2,704	236	556
Congleton - -	487	417	511	895	2,310	2,718 11 8	907	403	1,000
	1,028	1,485	1,764	3,171	7,448	8,522 3 1	4,776	898	1,774

(D. 1.)

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FACTORY COMMISSION:

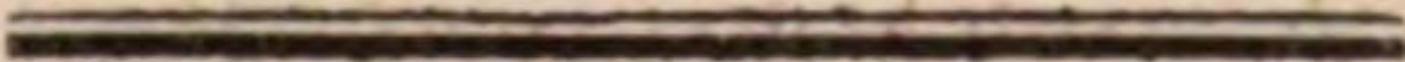
SUPPLEMENT (P.) (GENERAL.)

Distributing the 7,448 Hands (employed in ALL THE MILLS included in the Two preceding Lists) into the Three different BRANCHES or DEPARTMENTS of Silk-working, and showing the Aggregate NET Earnings of the whole Number of Operatives in each BRANCH realised by them during the Month ending 4th May 1833.

		Adults.		Children under Eighteen Years.		Total Number employed.	Aggregate Net Earnings for the Month ending 4th May 1833.
		Males.	Females.	Males.	Females.		
Employed	In the throwing department -	568	1,072	1,667	2,929	6,231	£ s. d. 6,211 1 10
	In the weaving department -	412	413	97	242	1,164	2,136 18 1
	As engineers, mechanics, &c. -	53	—	—	—	53	174 3 2
		1,028	1,485	1,764	3,171	7,448	8,522 3 1

N.B.—All the hands employed in the silk-mills appear to have been in the direct employ of the proprietor.

SAMUEL STANWAY.



FLAX MILL.

NOTICE.

Finding a Flax-mill in one part of the Lancashire district which I was visiting, I immediately prepared Forms (on the same principle as those for cotton and silk mills), and requested they might be filled up. The following are the Returns. They have neither been tabled nor examined.

I saw no other Flax-mill in the district, and as I prepared these Forms on the spur of the moment, and upon the information of *only one person*, it is possible that they do not, in every instance, pierce deep enough into the customs and arrangements of the business for rendering the *force* of the answers precise.

I perceive the effect of this under the head of Flax-dressers. I suppose the answer to mean that the 33 male adult Flax-dressers are paid both by weekly wages and by the quantity of work they turn out—that for the month ending 4th May 1833 they received £52. 13s. 10d. on account of weekly wages, and the further sum of £66. 17s. 10d. on account of work turned out. The Form nevertheless penetrates very far into the customs on which the business is conducted in this mill. It will be observed, that though the subordinate operatives are paid mostly by weekly wages, the head operatives, those who control, are paid mostly according to quantity of work turned out.

Should any future statistical Inquirer think of adopting the principles on which my inquiries were conducted, it may not be amiss to observe, that a rigorous examination of several operatives, regarding each branch of occupation, is requisite before the Form of Inquiry can be constructed. It must then be divided into such a number of Schedules as shall appear requisite, and each headed in letters of a character to attract the attention of the respondent to the main point. The answer becomes then a matter of so much ease, that there is little probability of its being wrongly given, either from design or accident, though clerical errors may occur. These however can be rectified by the establishment of proper checks and tests.

I constructed the Cotton-mill Forms before the others; and they are of such a nature, as to size of leaf, shape, and nature of type, that they could be answered from a mill containing 1,000 hands in a few hours. The division into ages appears the most lengthy part of the process, but it would not consume above five minutes to effect it for a room containing 100 operatives of all ages and both sexes. The overlooker enters and stops the engine, he then directs (in a spinning room) all the males to stay within the mules and all the females to come out from them; then he directs all the females above 18 to go to one end of the room and those below to go to the other. He takes this latter class, and directs those above 14 to leave the room, he then counts each of the three classes and learns the numbers of each age; he performs the same process with the males. The whole of this process is naturally dictated to him by the construction of the form.

The Cotton Forms are so constructed that were it necessary for public purposes to learn the actual state of cotton-working at any future moment, the issue of similar ones would enable the government to obtain the whole information in a fortnight from all the mills in England, and a sufficient number of clerks, under the direction of an able accountant, might take out the results and present them in a tabular form in another fortnight, when the progressive or retrograde motion of the whole cotton business of England in all its parts would be visible with reference to the date of the Tables which I have submitted.

It appears to me that the principles on which this investigation is based admit of a very general, or at any rate a very extensive application.

The Silk Forms are constructed with as much care as the Cotton, but the Silk-masters as a body were not so ready to answer the Inquiries as the Cotton-masters, and consequently I am unwilling to draw general conclusions from the Silk Tables.

8th March 1834.

JOHN W. COWELL.

(D. 1.)

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RETURN from FLAX-MILL.

- 1.—State the Number of Persons employed in your Counting House } 3
Establishment - - - - - }
- 2.—State the Number of Persons employed by you in your Warehouse } 2
Establishment - - - - - }
- 3.—State the Number of Persons employed by you, exclusive of those } 366
in your Counting House and Warehouse - - - }
- 4.—State the Total Number of Persons employed by you - - - 371
- 5.—State the Total Amount of Wages paid by you to the whole Number } £508 8s. 9½d.
of Hands, specified in your Answer to Question 3, during the }
Month ending Saturday, 4th May 1833 - - - }
- 6.—Fill up the Returns in the annexed Forms, A, B, C, D, E, F, G, H.

MACHINE ROOM.

18 Mechanics, Joiners and Jobbers - £64 0s. 4d. - Weekly Wages - M.

FLAX DRESSERS.

33 Men Adults - £52 13s. 10d. - 2d, £66 17s. 10d. - Both - M.

ENGINE MEN.

2 Male Adults - £4 0s. 0d. - 2d, £4 6s. 4d. - Weekly Wages - M.

(A.)

HECKLING MACHINE ROOM.

—	Total Number.	Total Net Amount of Earnings for each Week in the Month ending 4th May.				Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
		1st Week.	2d Week.	3d Week.	4th Week.		
Overlooker -	1	-	£ s. d. 2 4 2	-	£ s. d. 2 5 6	Weekly Wages	M.
Men -	—	—	—	—	—	—	—
Boys -	11	-	2 9 4	-	2 9 0	-	M.
Girls -	7	-	1 10 6	-	1 10 3	-	M.
Women -	—	—	—	—	—	—	—
TOTAL -	19	-	6 4 0	-	6 4 9	—	—
Signature of Overlooker who pays the } hands in this department - - }							

(B.)

LINE PREPARING ROOM.

—	Total Number.	Total Net Amount of Earnings for each Week in the Month ending 4th May.				Whether working by Quantity of Work, or by fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
		1st Week.	2d Week.	3d Week.	4th Week.		
Overlooker -	1	-	£ s. d. 2 8 8	-	£ s. d. 2 7 8	Piece Work	M.
Men -	—	—	—	—	—	—	—
Boys -	1	-	0 7 6	-	0 7 6	Weekly Wages	M.
Women -	16	-	6 14 7½	-	8 13 0	-	M.
Girls -	22	-	10 7 8	-	11 3 2	Both	M.
TOTAL -	40	-	19 18 5½	-	22 11 4	—	—
Signature of Overlooker who pays the } hands in this department - - }							

* In stating your replies, the letters M. and O. may be used to signify "Masters" and "Operatives."

(C.)

CARD ROOM.

	Whether Adults or not; i. e. whether or not under 18.				Total Number.	Total Net Amount of Earnings for each Week in the Month ending 4th May.				Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.	2d Week.	3d Week.	4th Week.		
Overlooker - -	1	-	-	-	1	-	£ s. d. 1 18 0	-	£ s. d. 2 0 0	Piece Work	M.
Carders - -	-	-	-	-	-	-	-	-	-	-	-
Stretchers or Rovers	-	-	-	-	-	-	-	-	-	-	-
Jack Frame Tenters	-	-	-	-	-	-	-	-	-	-	-
Jobbers - -	-	-	2	2	4	-	1 14 1	-	1 12 4	Weekly Wages	M.
Strippers - -	-	-	-	-	-	-	-	-	-	-	-
Bobbin Frame Tenters - -	-	-	-	3	3	-	1 13 6	-	1 14 6	Piece Work	M.
Drawing Tenter - -	-	1	-	5	6	-	2 2 5	-	2 17 8	Weekly Wages	M.
Back Tenter - -	-	-	-	-	-	-	-	-	-	-	-
Card Tenters - -	-	-	-	5	5	-	2 5 6½	-	1 10 2½	-	M.
Feeder - -	-	-	-	4	4	-	2 1 3½	-	1 17 9	-	M.
Blowing Tenter - -	-	-	-	-	-	-	-	-	-	-	-
TOTAL -	1	1	2	19	23	-	11 14 10	-	11 12 5½	-	-
Signature of Overlooker who pays the } hands in this department - - }											

(D.)

SPINNING ROOMS.

	Whether Adults or not; i.e. whether or not under 18.				Total No.	Total Net Amount of Earnings for each Week in the month ending 4th May.				Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.	2nd Week.	3d Week.	4th Week.		
Overlooker -											
Spinners - -											
Piecers - -											
Creel Fillers -											
Scavengers -											
Set Weighers -											
TOTAL -											
Signature of Overlooker who pays the } hands in this department - - }											

(E.)

THROSTLE SPINNING.

	Whether Adults or not; i. e. whether or not under 18.				Total Number.	Total Net Amount of Earnings for each Week in the Month ending 4th May.				Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.	2d Week.	3d Week.	4th Week.		
Overlooker - -	6	-	-	-	6	-	£ s. d. 8 2 8	-	£ s. d. 8 0 6	Both	M.
Jobbers - -	-	-	7	-	7	-	2 15 6	-	2 8 2	Fixed Wages	M.
Throstle Spinners - -	-	11	4	66	81	-	44 5 11½	-	44 12 8	-	M.
Bobbin Doffers - -	-	-	3	69	72	-	14 18 1	-	14 8 7	-	M.
Bobbin Carriers - -	-	-	6	-	6	-	2 6 2	-	1 12 4	-	M.
Roving Carriers - -	-	1	1	-	2	-	{ 0 11 0 0 12 4	{ - {	{ 0 11 0 0 14 0	{ - -	M.
TOTAL -	6	12	21	135	174	-	73 11 8½	-	72 7 3	-	-
Signature of Overlooker who pays the } hands in this department - - }											

* In stating your replies, the letters M. and O. may be used to signify "Masters" and "Operatives."

(D. 1.)

Z d 2

(F.)

REELING, &c.

	Whether Adults or not ; i. e. whether or not under 18.				Total Number.	Total Net Amount of Earnings for each Week in the Month ending 4th May.				Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.	2d Week.	3d Week.	4th Week.		
Overlooker - -	1	- -	- -	- -	1	- -	£ s. d. 1 10 4	- -	£ s. d. 1 9 6	Piece Work	M.
Reelers - -	- -	22	- -	6	28	- -	23 5 9½	- -	21 3 8½	- - -	M.
Winders - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Doublers - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Dryers - -	1	- -	3	- -	4	- -	2 3 0½	- -	2 8 8½	- - -	M.
Makers up - -	3	- -	- -	- -	3	- -	5 15 3	- -	4 9 11	- - -	M.
TOTAL -	5	22	3	6	36	- -	32 19 5	- -	29 11 10	- -	- -
Signature of Overlooker who pays the } hands in this department - - }											

(G.)

WEAVING.

	Whether Adults or not ; i. e. whether or not under 18.				Total Number.	Total Net Amount of Earnings for each Week in the Month ending 4th May.				Whether working by Quantity of Work, or for fixed Weekly Wages.	Whether in direct Employ of Master or Operative.*
	Male Adults.	Female Adults.	Males under 18.	Females under 18.		1st Week.	2d Week.	3d Week.	4th Week.		
Winders' Overlooker	1	- -	- -	- -	1	- -	£ s. d. 1 10 0	- -	£ s. d. 1 10 0	- -	- -
Overlooker - -	1	- -	- -	- -	1	- -	2 4 0	- -	2 4 0	Weekly Wages	M.
Reachers (to Drawers-in and Heald Knitters) - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Menders - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Doublers - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Heald Knitters - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Winders - -	- -	4	- -	8	12	- -	3 15 6	- -	5 18 3	Piece Work	M.
Warpers - -	- -	2	- -	- -	2	- -	2 2 0	- -	2 5 6	- - -	M.
Weavers - -	- -	- -	3	- -	3	- -	1 2 6	- -	1 5 6	- - -	M.
Assistants - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Helpers - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Size Makers - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Reed Makers - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Dressers - -	1	- -	- -	- -	1	- -	1 14 3	- -	1 14 11	Weekly Wages	M.
Twister-in - -	1	- -	- -	- -	1	- -	1 4 0	- -	1 4 0	- - -	M.
TOTAL -	{ 3 } 1	6	3	8	{ 20 } 1	- -	12 2 3 1 10 0	- -	14 12 2 1 10 0	- -	- -
Signature of Overlooker who pays the } hands in this department - - }											

(H.)

OTHER MANAGERS AND OVERLOOKERS.

Are they paid according to the quantity of work turned out in your mill, or by a fixed salary? }Both.

Name and Signature of the Answerer.....For Messrs. E. & F.

J. W.

* In stating your replies, the Letters M. and O. may be used to signify "Masters" and "Operatives."

RETURN from FLAX-MILL.

FACTORY COMMISSION.

- 1.—State the Number of Hours which your Mill was at work during the
Month ending the 4th May, or during the Period for which you
have made your Return - - - - -
- 313½ Hours.
- 2.—State the Total Amount of *Net Earnings* paid during the *aforesaid*
Period to all the Persons in your Employ under the Age of Four-
teen - - - - -
- £78 7s. 1½d.
- 3.—Fill up the annexed Form showing the Total Number of Children
under Fourteen Years of Age employed by you - - - - -
150.

CHILDREN UNDER 14 YEARS OF AGE.

Employments.					Males.	Females.	Total.	Whether in direct Employ of Master or Operative.*
If there are any other Descriptions of Hands in your Employ, under 14 Years of Age, you are requested to specify the same.	Winders	-	-	-	—	5	5	M.
	Hecklers by Machinery	-	-	-	11	7	18	M.
	Spinners	-	-	-	4	41	45	M.
	Bobbin Carriers	-	-	-	5	—	5	M.
	Jobbers	-	-	-	4	—	4	M.
	Card Tenter	-	-	-	—	1	1	M.
	Doffers	-	-	-	3	69	72	M.
TOTAL - - -					27	123	150	

Name and Signature of Answerer For Messrs. E. & F.

J. W.

* In stating your replies, the letters M. and O. may be used to signify "Masters" and "Operatives."

NOTICE.

These Tables regarding the Stockport Sunday-school are to be considered as forming part of the body of my Preface to the Cotton and Silk Tables, and they would have been introduced at the place in page 119 *a a*, where they are referred to, but for the interruption which this would have caused to the text.

They are published for the mere purpose of illustrating the causes which influence the different proportions in which the sexes are employed in cotton working. I therefore abstain from pointing out other circumstances which they indicate.

The "years" in these Tables are to be understood as those which they are completing. The answers at all schools, and every where else in the Lancaster district, always referred, I observed, to the year the respondent was completing, and was invariably "going five," or "going fifty," as the case might be.

JOHN W. COWELL.

EPITOME of the Trades and Occupations of the Boys instructed in the STOCKPORT Sunday School.

OCCUPATIONS.	YEARS of AGE.																							Total.
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	29	
At home in no Em- ployment -	29	57	56	56	37	28	7	8	8	6	7	-	-	-	-	-	-	-	-	-	-	-	-	299
At Day School do. -	4	18	29	19	19	16	13	4	6	2	1	-	-	-	1	-	-	-	-	-	-	-	-	132
Employed in Factories	1	4	16	31	74	113	125	99	112	106	85	65	59	40	25	19	11	4	4	-	-	1	-	994
Baker -	-	-	-	-	-	-	1	-	-	-	1	1	-	-	-	-	1	-	1	-	-	-	-	5
Bleacher -	-	-	-	-	1	1	-	1	-	2	1	1	1	-	-	-	1	-	-	-	-	-	-	9
Brazier -	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Bricklayer -	-	-	-	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	3
Brushmaker -	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Butcher -	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	2
Cabinet Maker -	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Clerk or Boy in Office -	-	-	-	-	-	-	1	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Confectioner -	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Draper -	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Dyer -	-	-	-	2	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Engraver -	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Glazier -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Grocer -	-	-	-	-	-	-	1	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	4
Hair-dresser -	-	-	-	-	-	-	-	1	-	-	-	1	-	1	-	-	1	-	-	1	-	1	-	5
Hatter -	-	-	-	-	-	3	2	3	6	9	7	8	11	7	4	2	1	2	1	-	-	-	-	66
Heald Knitter -	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Hosier -	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Joiner -	-	-	-	-	-	-	-	1	-	1	1	2	1	-	2	-	1	-	-	-	-	-	-	9
Ironmoulder -	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Labourers -	-	-	-	1	-	2	2	1	2	-	-	3	-	-	1	-	-	-	-	-	-	-	-	12
Do. in Agriculture -	-	-	-	-	-	1	2	3	5	4	-	2	1	2	-	1	-	1	-	-	1	-	-	23
Masons -	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	3
Millers -	-	-	-	-	-	-	-	-	2	-	1	1	1	-	-	-	-	-	-	-	-	-	-	5
Millwrights -	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-	-	-	-	-	-	-	-	3
Painter -	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	2
Printer -	-	-	-	-	-	8	-	-	-	3	-	2	-	-	1	-	1	-	-	2	-	-	-	17
Rope Maker -	-	-	-	-	1	1	2	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	6
Shoe Maker -	-	-	-	-	-	-	1	1	5	4	4	5	3	3	2	-	-	-	-	-	-	-	-	28
Smith -	-	-	-	-	-	-	-	-	-	-	1	4	3	-	-	2	-	-	-	-	-	-	-	10
Shuttlemaker -	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	2
Spindlemaker -	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Shopboys -	-	-	-	-	-	-	-	-	-	-	1	4	2	1	1	1	-	-	-	-	-	-	-	10
Tailor -	-	-	-	-	1	1	1	2	-	4	1	3	2	4	1	2	-	-	-	-	-	-	-	22
Turner -	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Weaver (hand-loom) -	-	-	-	-	-	-	2	3	-	-	-	-	3	-	2	-	-	-	-	-	2	-	1	13
Winder -	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Other Trades (and Two whose Em- ployments are not mentioned) -	-	-	-	-	-	2	-	-	2	2	4	1	-	-	-	-	-	-	-	-	-	-	-	11
	34	79	102	109	134	177	162	130	150	154	121	108	92	60	43	27	16	8	6	2	4	1	1	1,719

EPITOME of Trades and Occupations of the Girls instructed in the STOCKPORT Sunday School.

OCCUPATION.	YEARS of AGE.																							Total.
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	26	29.		
In no Employ :																								
At home - -	10	9	11	8	21	8	6	6	1	5	1	-	1	1	-	-	-	-	-	-	-	-	88	
At Day School - -	32	52	34	34	36	32	17	8	5	1	4	1	-	-	-	-	-	-	-	-	-	-	256	
Employed in Factories -	-	1	20	48	59	114	74	124	104	106	125	96	89	93	71	38	34	21	6	4	-	-	1,227	
Domestic Servants -	4	9	19	42	36	28	24	20	19	18	20	12	15	7	2	2	2	-	1	-	-	1	281	
Bonnet Makers -	-	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	3	
Hat Trimmers - -	-	1	-	-	2	3	2	2	5	8	3	3	1	3	1	-	-	-	-	-	-	-	34	
Dress Makers - -	-	-	-	-	-	2	-	1	3	3	4	5	5	3	2	2	-	-	-	-	1	-	31	
Heald Knitters - -	-	-	-	2	2	3	2	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-	12	
Handloom Weavers -	-	-	-	-	-	-	-	-	-	2	1	-	1	2	2	-	-	-	-	-	-	-	8	
Brickmaker - -	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	
	46	72	84	134	156	190	126	161	138	145	158	117	115	109	78	42	36	21	7	4	1	1	1,941	

EPITOME of the Trades and Occupations of the Boys educated in the Branch Schools of the STOCKPORT Sunday School.

OCCUPATION.	YEARS OF AGE.																Total.
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	22	
At Home in no } Employment - }	6	11	14	13	11	16	1	3	3	1	-	-	-	-	-	-	79
At Day School do. - }	26	33	34	29	12	12	6	7	9	1	-	-	-	-	-	-	168
Employed in Fac- } tories - }	-	-	-	2	32	32	33	33	23	30	17	9	4	1	2	1	219
Architect -	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Bleachers -	-	-	-	-	-	-	-	-	-	2	1	1	2	-	-	1	7
Brickmakers -	-	-	-	-	-	2	1	-	1	-	-	1	-	-	-	-	5
Bricklayers -	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Cloth-finishers -	-	-	-	-	-	1	-	1	3	3	2	2	-	2	1	-	15
Cloth-singers -	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Domestic Ser- } vants - }	-	-	-	-	-	-	-	-	1	2	2	1	-	-	1	-	7
Draper -	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Dyer -	-	-	-	-	-	-	-	-	1	-	-	1	-	-	1	-	3
Hatter -	-	-	-	-	1	1	-	2	1	1	3	1	-	-	-	-	10
Joiner -	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Labourer -	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1	-	3
Mechanic -	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	2
Painter -	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Printers -	-	-	-	-	-	-	-	2	-	1	-	-	-	-	-	-	3
Sadler -	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Shoemaker -	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Smith -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Tailor -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Tinman -	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Weavers (hand- } loom) - }	-	-	-	-	-	-	-	4	1	5	4	3	2	1	-	-	20
Winders -	-	-	1	1	4	3	3	1	1	-	-	-	-	-	-	-	14
Uncertain -	19	17	14	13	4	-	5	-	2	-	-	-	-	-	-	-	74
	51	60	63	58	64	67	49	54	46	51	31	22	9	4	8	3	640

EPITOME of the Trades and Occupations of the Girls educated in the Branch Schools of the STOCKPORT Sunday School.

OCCUPATION.	YEARS OF AGE.																					Total.
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	
In no Employment:																						
At Home -	21	23	22	19	21	5	4	2	1	-	-	-	-	-	-	-	-	-	-	-	-	118
At Day School -	20	19	16	18	10	2	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	88
Employed in Fac- tories - }	-	-	-	-	15	37	24	25	18	15	18	19	12	16	8	7	6	4	1	1	2	228
Not in Factories:																						
Brickmaker -	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Cloth-finisher -	-	-	-	-	-	4	-	-	1	2	2	2	1	-	2	-	-	1	-	-	-	15
Domestic -	-	-	3	2	10	4	4	2	1	5	3	2	1	1	-	-	-	1	-	-	-	39
Dressmakers -	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-	1	-	-	-	-	4
Hat-trimmer -	-	-	-	-	1	2	4	4	3	-	1	1	1	2	-	-	-	-	-	-	-	19
Healdreacher -	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Hand loom- weaver - }	-	-	-	-	1	1	2	1	3	2	2	6	5	6	2	1	-	-	1	-	-	33
Winder -	-	-	-	3	3	3	6	-	1	1	-	-	-	-	-	-	-	-	-	-	-	17
Uncertain -	17	11	9	9	6	-	3	-	-	-	13	-	-	-	-	-	-	-	-	-	-	68
	58	53	50	53	68	58	48	36	29	26	39	30	21	25	13	8	7	6	2	1	2	633

The Branch Schools are at { Brinksway.
Lancashire Hill.
Heaviley.
Heaton Mersey.

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Lancashire District.

Bolton.

MINUTES of DEPUTATION from BOLTON.*

Bolton, 1st July 1833.

This morning Mr. Abraham Haigh, chairman, Mr. Peter Ormerod, Mr. Edward Bolling, Mr. W. Garnett Taylor, and Mr. H. Ashworth, waited upon Mr. Cowell as a deputation from a meeting of the principal cotton-spinners of Bolton and the neighbourhood (the proprietors of seven eighths of the spindles attended the meeting), to state their views on the Factory question.

The meeting had been unanimous in coming to certain Resolutions of which they were to give a copy. The following is a copy of those Resolutions :—

At a Meeting of the Master Cotton Spinners of Bolton, held at the Commercial Inn on Monday the 1st day of July 1833 :

Mr. ABRAHAM HAIGH in the Chair ;

The following Resolutions were carried unanimously :—

It was moved by Mr. Edward Bolling, and seconded by Mr. Warr,

1st.—That the hours of labour in mills should not exceed sixty-nine per week.

It was moved by Mr. John Bolling, and seconded by Mr. Ainsworth,

2d.—That the period of sixty-nine hours per week should be worked, by allowing twelve hours per day for five days, and nine hours for Saturdays.

It was moved by Mr. Ormerod, and seconded by Mr. Rothwell,

3d.—That as a system of relays of hands under fourteen years of age would be evaded, and could not be made effective if passed into a law, it is proposed in lieu thereof that children should not be admitted into mills under eleven years of age.

It was moved by Mr. John Bolling, and seconded by Mr. Ormerod,

4th.—That it be suggested to Mr. Cowell, one of His Majesty's Commissioners, that this meeting is favourable to the appointment of a warden in each district, whose duty it shall be to enforce the provisions of the Act.

It was moved by Mr. Taylor, and seconded by Mr. Thomasson,

5th.—That night-working in mills ought to be altogether abolished.

(Signed) ABRAHAM HAIGH, Chairman.

The resolutions were read by Mr. Ormerod. Before any questions were asked regarding them, Mr. William Garnett Taylor stated in reference to the last, concerning night-work, that the prospect of a short-time bill had already led him to continue night-work at one of his mills ; that he thought the custom most baneful to the morals and health of the operatives engaged in it ; that he was extremely anxious that the custom itself should be forbidden by law, but that as long as it was permissible one master must here and there adopt it if another commences ; and that if the custom of working by relays of little hands should be attempted to be introduced into the cotton manufacture by Act of Parliament, night-working in his opinion would be rendered imperative upon many persons, and become general ; and he thought that if a bill were for less than sixty-nine hours it would increase the inducement to night-work ; but that if an efficient bill preventing working more than sixty-nine hours a week were passed, then that night-work might be abolished.

The foregoing minute was read over to the gentlemen present, who all concurred in the general opinions expressed by Mr. Taylor, with the exception of Mr. Ormerod, who, while he was of opinion with the other gentlemen that a ten-hour-bill would have a strong tendency to produce night-work, yet conceived that, as relays of little hands allowed to work eight hours per day would naturally lead to adults and mills working sixteen hours a day, thus the tendency of such a measure would not be to increase the practice of night-work.

Whereupon Messrs. Ashworth and Taylor stated that their opinion of the tendency of relays to produce night-work related more strongly to the case of mills in the country than in town ; for, Mr. Ashworth said, " I give my answer upon the calculation that I must import fifty families to supply me with relays of children ; those families will after a year or two press upon me in such a manner that the whole body of operatives will be compelled to arrange itself in two classes, a night and day work class ; or for two sets of eight hours a day each.

* Forwarded to the Central Board on the 3d of July 1833.

FURTHER EXAMINATIONS by Mr. COWELL.*

BOLTON.

26th June 1833.

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Lancashire District

Bolton.

Sir John Hobhouse's Act, after prohibiting the employment of persons under the age of twenty-one years at night, proceeds to enforce the prohibition by declaring that no owner or occupier of a mill shall be liable to the penalty for having employed a person under that age at night, provided he shall have received a certificate that the person so employed (though really under the age of twenty-one years) is above that age. Thus the parents of children much under the legal age became exposed to the temptation of certifying that they were above it; and the mill-owners who worked at night were naturally tempted to avoid a rigid scrutiny as to the truth of the certificates tendered by parents, because in the cotton manufactory the rate of wages increases very heavily with the increase of age, till it reaches its maximum for both men and women about the age of twenty-five, and persons of the ages of sixteen, seventeen, and eighteen can be procured at lower wages than those of twenty-two, twenty-three, and twenty-four. I went to the night-working factory of Messrs. Goodwin and Hughes, without any notice, on the night of the 25th of June, and found many persons there who were much below the age of twenty-one; only two, however, admitted the fact; the others stoutly persisted that they were of the legal age.

Greenhilge and Bentley are, one the overlooker, and the other the manager of Messrs. Goodwin and Hughes' factory at Rosehill. Rostron, who had certified that he was above twenty-one, and admitted that he was only seventeen, it will be seen was dismissed the day after my visit. There were several who appeared younger than him, and many whom it was impossible to suppose were above twenty-one. The other who admitted nonage was a girl, but I did not acquaint Mr. Hughes with her admission. The moral effect of the dismissal of Rostron on others as well as himself is obvious. He was dismissed, ostensibly, for being under twenty-one; had he persevered, like many others in Messrs. Goodwin and Hughes' factory, in his original falsehood, he would have kept his situation as well as they; consequently his dismissal must appear to them as well as to himself to be a punishment consequent upon speaking truth.

JOSEPH GREENHILGE, Night-overlooker of Messrs. Goodwin and Hughes' Factory at Rosehill, aged twenty-six, sworn and examined, 26th June 1833. *Joseph Greenhilge.*

When I was at Messrs. Goodwin and Hughes' night-working factory last night, between the hours of half past ten and twelve, I brought to you and to Mr. Hughes two boys, one of whom had previously admitted to me that he was only seventeen, and the other of whom did not appear older, and I asked you and Mr. Hughes how you could consent to receive and register a solemn declaration from those lads that they were above twenty-one, when it must have been obvious to you both, and to you in particular as overlooker, that they were considerably under that age; I now repeat that question, and desire you to state upon your oath whether you did not know that Richard Rostron was several years under the age of twenty-one at the time when you took his certificate that he was above that age?—I did not take Richard Rostron's certificate, but the manager did. I did not know that he was under the age of twenty-one.

Do I understand you to say, upon your oath, that until I was in the mill last night you did not know and that you did not believe that Richard Rostron was under the age of twenty-one?—I did not know and I did not believe that Richard Rostron was under the age of twenty-one till you told me in the mill last night.

How long have you been employed in Messrs. Goodwin and Hughes' mill, and how long have you been overlooker of the night hands?—I believe I have been in Messrs. Goodwin and Hughes' employ about two years and a half, but I have been overlooker of night hands at their mill since the 12th of November 1831.

How long has Richard Rostron been in Messrs. Goodwin and Hughes' employ?—He tells me that he was in their employ two years ago, but it is only a month at present since he has come back to them, and since I have known him. His mother has come repeatedly

* N.B.—Not received by the Central Board till the 23d July 1833.

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to the manager, as I understand from him, to get him into employ, and last January she signed a certificate, which you will find in this book, certifying that he was above the age of twenty-one.

Copy extract of the book referred to by witness:—

“ Bolton, 29th January 1833.

“ I, Ellen Rostron, certify that my son, Richard Rostron, is twenty-one years of age.

“ Rich^d Rostron + his mark.

“ Ellen Rostron + her mark.

“ Mother of the above Richard Rostron.

“ Witness, John Bentley.
 James Ingham.”

Then, though Ellen Rostron signed this certificate last January, her son Richard did not begin to work till a month ago; is that the case?—That is the case as I understand.

Had you ever seen, known, or spoken to Richard Rostron or his mother before he came to work a month ago at Messrs. Goodwin and Hughes' mill?—I don't know that I have ever seen, known, or spoken to Richard Rostron before he came to work at Messrs. Goodwin and Hughes' mill a month ago.

Did you know that Richard Rostron's name was on the list of certificates?—Yes, I knew that it was.

When he came to work a month ago, and you saw him, did you believe for one instant, or did you suppose for one instant, that he was past the age of twenty-one years?—

After Mr. Cowell had informed the witness that he should repeat the above question as many times as would be necessary in order to obtain a distinct answer to it, witness replied, as he had done several times before,—

I believed it upon his word.

It must have been perfectly apparent to you, as I told you and Mr. Hughes last night, that the boy was no more twenty-one years of age than a baby in arms was twenty-one years of age; and I ask you again upon your oath, whether, when you saw Richard Rostron in Messrs. Goodwin and Hughes' mill for the first time a month ago, or when you have seen him at any other subsequent time, you ever believed in your own mind for one moment, or ever supposed in your own mind for one moment, that Richard Rostron was past twenty-one years of age?—Well, I didn't believe that he was under.

I shall, as I have told you before, repeat the foregoing question to you till you give a distinct answer to it; and I ask again, did you ever believe in your own mind, or ever suppose in your own mind, for one moment, that Richard Rostron was past the age of twenty-one? You will remember last night that I told you, in the presence of Mr. Hughes, that in examining you this morning I should put you to your oath, and that I recommended you to consider seriously concerning the evidence which I should this morning require of you regarding Messrs. Goodwin and Hughes' mill before you came, in order that you might have every opportunity of saving your conscience. I care nothing about your believing the certificate, and about your having asked the spinner whether the boy was above twenty-one years of age, nor about the boy having told you so; I require an answer as to the belief on your own mind, and conveyed in the very words in which I proposed the question, and according to the answer that you give I shall follow up my examination by questioning you as to your suspicion respecting the age of Richard Rostron. I now repeat the question in the same words as before.

Question read over again to witness, “ It must have been perfectly apparent to you,” &c. Paper here handed to witness with the question, which he repeated in his answer as follows:

Upon my oath, when I saw Richard Rostron in Messrs. Goodwin and Hughes' mill a month ago, and when I have seen him every other subsequent time, I have believed in my own mind for a moment, and I have supposed in my own mind for a moment, that Richard Rostron was past the age of twenty-one years.

Have you always and at every moment from the time that Richard Rostron came to work at Messrs. Goodwin and Hughes' mill a month ago up till last night believed in your own mind, throughout the whole of that time, and supposed in your own mind throughout the whole of that time, that Richard Rostron was above the age of twenty-one?—

Question read over to witness twice, and witness asked whether he thoroughly understood the question, to which he replied in the affirmative; when the question was read over to him a third time, and his answer given in the following words:

I have always and at every moment from the time that Richard Rostron came to work at Messrs. Goodwin and Hughes' mill a month ago, up till last night, believed in my own mind throughout the whole of that time, and supposed in my own mind throughout the whole of that time, that Richard Rostron was above the age of twenty-one.

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Joseph Greenhilge.

Did you ever suspect for a moment in your own mind during the whole of that time that that he was under the age of twenty-one?—I never did suspect for one moment in my own mind during the whole of that time that he was under the age of twenty-one.

And this answer you give me upon your oath?—I give you that answer upon my oath.

Have you any thing to add to it, bearing in mind that I care nothing about the certificate that his mother gave, or the information that the boy gave himself; I ask as to your suspicions?—I have nothing more to add.

Here the witness was dismissed.

JOHN BENTLEY sworn and examined, 26th June 1833.

John Bentley.

What is the occasion of your waiting upon me this morning?—I am manager of Messrs. Goodwin and Hughes' mill, and my employers wished me to come down this morning to you with the night-overlooker, Joseph Greenhilge.

How many night hands do Messrs. Goodwin and Hughes employ?—Here the witness enumerated, when it appeared that there were—

Engineer - - - man - - 1

Spinning Department.

Night overlooker - - - man - - 1

Spinners - - - men - - 14

Piecers - - - - - 42

Stretchers and billiers - - men - - 4

Setters-on to billiers - - women - - 4

Roving sorter - - - man - - 1

Card Room.

Carder - - - - man - - 1

Strippers - - - - men - - 3

Card-tenters - - - women - - 4

Drawing-frame-tenters - women - - 4

Fly-frame-tenters - - women - - 4

Total 83

How many of these are women?—Here witness went over the foregoing list, and the sex of the hands was set against them, from which it appeared that independent of the piecers there were sixteen females, and that of the forty-two piecers he should say that the females did not exceed fifteen or sixteen, being sure that they did not amount to twenty.

Out of the hands that you have enumerated, composing the night-working set of Messrs. Goodwin and Hughes, and amounting altogether to eighty-three, how many should you say would have been under twenty-one years of age in a similar set and number of day hands employed in a day mill at Bolton?—Nine tenths of the piecers would probably be under twenty-one years of age in a set of day hands; the four "setters on" would have been under twenty-one; the four card-tenters would have all been under twenty-one; and of the eight drawing-frame-tenters and fly-frame-tenters the greatest part would have been under twenty-one years of age.

So that I understand you to say that in a set of day hands amounting to eighty-three, and doing the same work as is done by Messrs. Goodwin and Hughes, about fifty would have been under the age of twenty-one?—Yes.

Do you know Richard Rostron?—Yes, sir; he is a piecer.

How long has he worked for Messrs. Goodwin and Hughes?—He has worked now about a month; I discharged him this morning as soon as I got to understand that there was some dispute about his age. He worked for a short time last January chiefly in the day, but I believe for two or three nights.

For how long altogether did he work last January?—I think for about a week, and when he worked at night he did not work during the day.

Who did he work for, and who engaged him?—The spinner engaged him, but I don't know what spinner it was.

Who examined as to whether he was above twenty-one years of age before he was permitted to work at night?—I asked him his age, and where he was christened, and so forth, and not being satisfied with that I sent for his mother, and said I thought he looked young, and she mentioned so many things about him in different ways that I believed what she said about him to be correct, that he was above twenty-one.

How long is it since Messrs. Goodwin and Hughes' mill has worked at night?—Three years the latter end of last March.

How long have you been in their employ?—Betwixt four and five years, of which time I have been about two years and a half manager, and before I was mechanic.

Do you take the certificates respecting age?—Yes; they are all in those two books, at least all those since the passing of the last Act; before the last Act hands above sixteen or eighteen years of age (I cannot say which) were allowed to do night work. I have not brought the list of them.

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Bolton.

John Bentley.

What is the average rate of a spinner's earnings at your mill, spinning the numbers you do, and working day work?—They will average from 28s. to 30s. day work.

What are the average wages of a big piecer working day work?—7s. 6d.

What of a middle piecer?—From 3s. 6d. to 4s. 6d.

What of a scavenger?—From 2s. to 2s. 6d.

What in general are the respective ages of big and middle piecers and scavengers working day work and earning those wages?—Big piecers here in Bolton run from sixteen to the time when they can get a pair of mules; middle piecers run from twelve to fifteen years old; scavengers run from nine to twelve years old.

What are the average earnings of a spinning-room hand above the age of twenty-one, and of a card-room hand above the age of twenty-one, working day-work; (that is to say,) if you wanted a card-room hand for any part of the preparation who was three or four and twenty years old, what would be his or her earnings here in Bolton?—A woman would not get above 7s. a week in any part of the card-room, let her be as old as she might; but strippers, who are men, would get from 9s. 6d. to 10s.; but I cannot answer for the spinning-room.

When Messrs Goodwin and Hughes set their mill to work night work, what allowance did they make to the spinners in addition to their usual earnings by the piece, in order to enable the spinners to pay men and women's rate of wages to piecers who in day work would run from the age of nine to twenty and twenty-one?—Messrs. Goodwin and Hughes spin yarn of the fineness of from number 70 to 90, and there is a list price agreed upon between spinners and masters upon this footing: If a spinner spins upon a mule of the size of 300 spindles, then, looking at the wages book, I see that he is paid at the rate of 3½d. for every pound of yarn that he turns out of the fineness of 70. Now there is a discount or deduction at the rate of one and a half per cent. on that amount for every dozen spindles belonging to the mule over and above 300; Messrs. Goodwin and Hughes deducted only one per cent. instead of one and a half; and of their fourteen mules which work at night, six pair have 384 spindles, one pair 396, and seven pair 408. Looking at the wages book, and seeing that a spinner's gross earnings or receipts are about 4l. 8s. a week, this half per cent. would make a difference of 3s. a week to (between) two men spinners, the night and the day spinner. There is likewise an allowance of 2s. 3d. a week for gas, which is charged to the day spinner, but not to the night spinner.

What is the total allowance made by Messrs. Goodwin and Hughes to a spinner, in addition to his positive and natural earnings, to enable him to provide hands above the age of twenty-one to do the work of hands whose age would run from nine to twenty or twenty-one if they worked during the day instead of night; is it 2s. or 3s. or 3s. 6d. or 4s. per week, or what is it?—3s. 6d.

What are the earnings of a night spinner, compared with the earnings of a day spinner, spinning the same numbers?—A night spinner's earnings are from 16s. to 20s. a week, spinning the same numbers as a day spinner, while a day spinner's are from 28s. to 30s.

What is the number of hours that a night spinner works during the week compared with a day spinner?—The night spinners work about sixty-three hours and a half, the day spinners sixty-seven hours and a half.

What quantity of work will a night spinner throw off in sixty-three hours and a half, and what quantity of work will the day spinner throw off in sixty-seven hours and a half, the numbers being supposed the same?—I should think the day spinners turn out from fifty to sixty pounds of spun yarn more in the course of the week than the night spinners do.

Looking over your book of weekly wages, I see that your fourteen pair of mules turn out from 3,000 to 3,600 pounds of yarn a week; am I to understand that one half of that, less a quantity from 50 to 60 pounds, is turned out by the night spinners?—Yes.

Since the night and day spinners approach so near in quantity of work done, what is the cause that the earnings of the night spinner, are under two thirds of the earnings of a day spinner?—The reason of that is that they have to pay more for their piecers; they pay 8s. a piece for their piecers, making 24s. in all, while the day spinners would pay only 14s.

Since, as you have said before, a male or female hand turned of twenty-one may get as a fly-frame tenter at the rate of 7s. a week, and a man as a stripper from 9s. to 10s., and since hands of that age, according to your last answer, demand as much for night work as for day work, how comes it that the night spinner alone consents to earn less by night than the day spinner can by day?—The reason of that is that there are so many spinners out of employment; some spinners out of employment turn piecers at 8s. a week, and these night spinners gain as much as many day spinners spinning coarse numbers.

Do you know or suppose you know any other reason for this difference?—No, I cannot say I know any other.

Are the night hands as respectable a set, men and women, as the day hands are?—Ours are, equally so.

Are your day hands as respectable a set of day hands as those in mills in and about Bolton of the same size as yours?—Yes, sir.

Have you ever heard that neighbours and persons who live on the road leading to your mill at Rosehill have complained of the improper language and conduct of your night hands as they go to and come from their work, of their brutal manners and obscene language,

language, and that since Messrs. Goodwin and Hughes have adopted night work much difference is perceptible to persons in the neighbourhood between the conduct of their night and day hands; have you never heard even a whisper of this?—No, not even a whisper, only one day there were two of the piecers fighting in the morning, of which I heard complaints.

Have you never heard a whisper even that persons in the neighbourhood thought the conduct and character of the night hands different from that of the day?—I have not, sir.

And upon your oath you consider the night hands working at Messrs. Goodwin and Hughes' mill as respectable a body as those in any day mill at Bolton of the same number?—Yes.

From the 26th of October 1831 up to the 24th of June 1833, being a period of only twenty months, you have received 415 certificates for night hands; have your day hands changed during that in the same degree?—No, sir; in that time there have not been 110 day hands left.

To what cause do you attribute this difference?—The night hands look out for day work at other places, and when they get a day place they leave.

Who engages the day and night spinners at your establishment?—I do; but the day spinner only is paid; when he is paid I have done, and the day spinner and night spinner settle the proportions of their earnings between themselves, with which I have nothing to do.

There are 427 certificates in these books, of which 415 are to the effect that the persons certifying are above the age of twenty-one, and twelve certify that the parties are above the age of eighteen; in most instances the certificate is attested by the parent of the party certifying, and the signatures are attested by two witnesses; how many certificates out of these 427 do you consider, suppose, suspect, believe, or know to have been or to be false?—I don't consider that any of them are false.

Do you suppose that any of them are false?—No.

Do you suspect that any of them are or were false?—No, excepting that which this morning I turned away.

Do you believe any to be false?—No.

Do you know any to be false?—No.

And these asseverations you make to me upon your oath?—Yes.

Out of the twenty or twenty-four male piecers in the spinning-room, how many should you say had never yet had occasion to shave themselves or be shaved?—I don't think there is more than four or five but what has been shaved, and I don't think there is them.

How many do you think have never been shaved?—I don't think we have one but what has been shaved.

Have any of those that never had been shaved up to twelve o'clock last night been shaved since that hour?—I can't answer that.

When I was in your mill last night I touched the chins and cheeks of several of the male piecers, and very narrowly inspected the chins and cheeks of several others. Did it ever strike you as singular or remarkable to see so large a proportion of young men, who are all, as you say, above the age of twenty-one years, out of so small a number as from twenty to twenty-four men, who have never been compelled to use the razor?—No, it has never struck me as singular at all.

And as they work with their coats and waistcoats off and shirts wide open, has it never struck you as at all singular or remarkable that so few out of the whole twenty or twenty-four have any hair on their bosoms?—No, it has not struck me as at all singular.

Do you know Jane Southward or Southwood?—We had a hand of that name, I believe; we have not now.

Do you know Jane Farn?—No; we never had one of that name.

Where were you last night at the time that I came to the mill?—I was at home.

At what hour did you hear that the Factory Commissioner had visited the mill?—I heard it at six o'clock this morning when I went up.

Which of your two masters was the first whom you saw?—I believe I saw Mr. Goodwin the first this morning.

What did Mr. Goodwin say to you regarding my visit last night?—He told me that the Factory Commissioner had been to the mill, and he asked me if the hands were all right as respects age, and I told him they were as far as I knew; he said that the night overlooker was to come down this morning at ten o'clock with the books, and that I had better come with him to answer any questions.

Did he give you any thing like instructions or suggestion as to what you might say or do?—No, not a word.

Did any other person?—No.

In a former answer you have said that Mr. Goodwin asked you this morning if the hands were all right as respects their age; has Mr. Goodwin taken no means to ascertain this of his

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Bolton.

John Bentley.

own knowledge, in order that he may avoid the crime of infringing the law, and the crime of putting persons in a situation which compels them to perjure themselves?—Mr. Goodwin has had piecers up frequently when he has thought that there have been any doubts, and questioned them, and questioned their parents.

Does Mr. Goodwin do this with respect to every hand in the spinning and card rooms concerning whom there may be a doubt, and concerning whom there must be a doubt from the mere circumstance of it being requisite to ask for a certificate?—No, he does not do it with all.

Out of the 427 persons admitted with certificates into his mill during the last twenty months, and whose certificates are in those books, how many do you suppose Mr. Goodwin spoke to before they were permitted to work in the mill at night?—I dare say he spoke to one half of them before they were permitted to come into the mill to work at night.

Since the time that his mill has worked by night, how many have you known him reject from suspicion that they were under twenty-one years of age, when they and their parents were ready to certify to the contrary?—I dare say he has rejected fifty or sixty; but I have rejected many more than he has.

How many have you rejected, should you say?—A very great number, I can't say how many, when their parents were with them ready to certify that they were above twenty-one.

Should you think that you have rejected 200?—I dare say in the whole I have rejected 200.

Though they and their parents were ready to certify that they were above twenty-one?—Yes.

How young should you judge, judging by the eye and such circumstances, was the youngest boy or girl you ever rejected?—I should think about sixteen was the youngest I ever rejected, judging by the eye.

Of what age should you think the majority of those 200 really were, taking them generally?—The majority I should think would be somewhere from eighteen to nineteen years of age.

And what should you think might have been the age of the remainder, speaking of them generally?—In a general way the remainder would be about seventeen.

And in all these cases the parents and parties themselves were ready to certify that they were above twenty-one years of age?—The parties themselves and all the parents that did come were ready.

And you think Mr. Goodwin rejected about fifty himself; how did he come to see them?—He is frequently up in my place, and all the hands that come for work come to me; that is the reason of his seeing them.

Does Mr. Goodwin often go into the mill at night?—Yes, he frequently goes in, and Mr. Hughes goes in two or three times every night.

So that Mr. Hughes and Mr. Goodwin, being frequently in the mill at night, must frequently see the night hands, and among them the piecers, setters on, and card-room hands. Did you ever hear them make any remarks about several of the male hands appearing to have no symptoms of beard?—No.

Do you suspect that any one hand, male or female, who was at work in the mill last night between the hours of ten and twelve to be under twenty-one years of age, excepting Richard Rostron?—No.

And you state upon your oath that you do not even suspect it?—I don't even suspect it.

Here witness was dismissed.

APPENDIX to the EXAMINATION of GREENHILGE and BENTLEY.

Bolton, 26th June 1833.

Particulars relative to the Two Certificate Books belonging to Messrs. Goodwin and Hughes relative to their Night Hands.

The first entry is dated Bolton, 26th October 1831, and runs,—

I certify that I am twenty-one years of age.

Richard Barlow † his mark.

Signed in the presence of

John Bentley. }
Richard Bentley. }

From the date of the first to that of the last, which was dated Bolton, 24th June 1833, and is of Mary Boardman † her mark, and to which the overlooker Joseph Greenhilge is one of the attesting witnesses, as he is to the preceding, there are 427 certificates, and of these sixty-one sign their own names, and the remaining 366 affix their mark, and twelve of them are that they are above eighteen years of age, being reelers. Total of certificates above twenty-one, 415.

The great proportion of those who appear unable to write must not be taken as evidence of the general low state of education among operative spinners, &c., because none but the most worthless engage in night working, except the spinners and upper card-room hands, who follow it often, from being out of day employ, till they can procure a day situation.

JOHN AINSWORTH sworn and examined, 26th June 1833.

Lancashire District.

Bolton.

John Ainsworth.

I am twenty-six years of age; at present stretcher in Mr. Bolling's mill, Bridge Street; formerly night worker at John Thomasson's mill at Mill Hill; began as a night and day hand; night and day work was taken by alternate weeks at Mr. Thomasson's manufactory; continued to work there as a stretcher for six months; I quitted it on account of having bad health; before I took to night work I had particularly good health, and finding during that time I continued at night work that my health was in a state of continual decay, I quitted Mr. Thomasson's mill.

Do you remember any alteration or occurrence connected with the hands employed in night work which took place in the early part of 1832?—There was an alteration took place then; something came down from London, according to what the master told us at that time, but I do not know what it was; but he said that we must get hands of the age of twenty-one. At that time I had two setters-on to my stretching-machine who were girls. One was sixteen years old, past. Her name was Betsy, but I never knew her surname. The other, Caroline Wood, was thirteen.

What wages did you pay them for stretching for you?—I paid 4s. to one, and 3s. to the other; 7s. in all.

Were you enabled after this order from Mr. Thomasson to obtain hands above the age of twenty-one to assist you at the same price?—I was enabled by Mr. Thomasson in this kind of way; when he told me all this he was to allow the night hands something extra beyond their weekly earnings, to pay for piecers and other assistants who were above the age of twenty-one, because the wages of those above twenty-one were of course higher than those under twenty-one; wherefore, after that order, he was obliged to allow us something extra to pay these hands. Now I was a stretcher, and had those two setters-on of which I told you, and Mr. Thomasson allowed me 4s. a week over and above my earnings to get setters-on who were more than twenty-one years of age, but I could not find two of that age for the money, which was 11s., so I tried to do with one, to whom I gave 7s., and did the rest of the other setter-on's work myself as well as I could. This went on for four weeks without Mr. Thomasson knowing it, but when he learnt that I had been doing without two setters-on for four weeks he deducted 2s. out of the 4s. which he allowed me for every week, making 8s. in all, and which he took back again for those four weeks, and then he allowed me 2s. over and above my former earnings during the whole time I remained there, I doing with only one setter-on; but there was a sort of general assistant to several of us stretchers, called a bobbin-carrier, to whom several of us contributed 3d. apiece, and the master made her wages up to 7s. a week after we had contributed this 3d., for all the other stretchers were in the same difficulty as myself to get two setters-on apiece above the age of twenty-one for that allowance which the master made over and above our usual weekly earnings, and which was 4s. a week for a stretcher who worked at a double billy as I did, and 2s. a week to the stretchers who worked at a single billy.

How many night hands, stretchers, spinners, and carders do you suppose Mr. Thomasson employed at that time, and how many young hands did they want, such as piecers, scavengers, and setters-on, to help them?—As well as I can calculate from memory, there were twelve stretchers, five spinners, two overlookers in the card-room, one overlooker of spinners and stretchers, which makes about twenty, and of them the stretchers and spinners had to find hands to help them above twenty-one, and so had the carders likewise.

Must not Mr. Thomasson and the overlooker of spinners and billiers, from their knowledge of the business, necessarily have known that it would be impossible for the stretchers and spinners to have found the same number of assistants as before, and who should be above the age of twenty-one, without paying higher wages than those extra allowances of 4s. and 2s. enabled them to do, unless their earnings were cut down?—They were aware that it could not have been done.

Did you know, or suspect you knew, of any false certificates of age being given in that mill, or did you see in that mill assistants, such as piecers, setters-on, and tenters, in the card-room, whom you knew were under the age of twenty-one?—I never saw any certificates, but there was a list-book in which hands entered their names that they were above twenty-one. I have seen that list-book on the outside often lying about, and once saw a name entered in it, but I never examined it; but there were many hands working in the mill who must have entered themselves as above twenty-one, that any one must have seen were not so old, and it must have been impossible for the master or overlooker to have come in without seeing and knowing the same.

You just now mentioned something about temptations to which it is not agreeable for parents to have their children exposed to in night work; explain yourself fully on this point?—As it is not natural for people to work at night, and as even the beasts lie down, so they that work at night become, when sleep comes on, in a manner insane. I have seen my piecer behind my billy lying back with her head against the creel fast asleep; I've called her, and she has started up with her hands wide open (in this manner), and she has shouted, "Mother, it's not time to go to factory yet," not knowing that she was in the factory at the very time; and she has come many a time and awakened me when I have fallen fast asleep with the handle of the billy in my hand, and wheels going. Then there are great

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Lancashire District.

Bolton.

John Ainsworth.

temptations both for old and young; there are boys of a very young age, and few young women will go to these places who have any character; if they do they must take great care, or it will be blasted. Indecencies and immoralities were talked of, but I saw but one, that was of my own setter-on. I had sent the bobbin-carrier for bobbins, and she not coming, I sent my setter-on, and she not returning as soon as she ought, I went to look for her, and found her and the overlooker in an indecent situation; she told me that she would stand it no longer, and would leave me the next morning; I said that she must then tell the master of what the overlooker had been doing to her. She told the manager the next morning, who sent for the overlooker, who, when he came, denied it; then they sent for me, and I told them in what manner I saw him having hold of her, with one hand round her neck, and the other in a very indecent situation: then the manager asked him again, and he did not then deny it, but said he was only searching her to see if she had any bobbing waste about her. I had no doubt of his real intent from what I saw if the girl would comply. The girl was about seventeen, and she told me that the overlooker had attacked her before in a similar manner, but not in the mill. In my stretchers rooms there was not much brutal and obscene language, because they were all women except myself, one boy, and another man stretcher, and one of the women sung very well, and we kept singing from time to time to keep us awake. But I understand in the spinning and card room there was much obscene language; one woman there had been a prostitute in the streets, and was, I understood, no better in the mill; but this I do not know of my own knowledge.

Are you married?—Yes; I have been married five years.

Would you wish a daughter, or sister, or your wife to work at night work in mills?—No, that I should not, nor even should I let my wife work at night; I would sooner starve.

Thomas Yates.

THOMAS YATES sworn and examined, 27th June 1833.

Is a native of Bolton; aged sixty; married; four children living; began working at carding at the age of seven years; carding was then by hand; then went to stock-carding; then at the age of about eleven went hand-loom weaving; continued at it nearly three years; then went to spinning upon common hand jennies; this was about the year 1787; continued a jenny-spinner for four years; then went to mule-spinning, mules being then turned by hand, at which he continued about seven years; then became overlooker of mule-spinning by power in Mr. Carlisle's mill, where he continued till the year 1823, being twenty-five years; then went to Mr. Bolling's as overlooker, who was the nephew of Mr. Carlisle, and with whom he has continued ever since; his own health has been always very good; does not know that he has had above six months illness in all his life; his wife was a spinner by common jennies; her health was very good till within two years of her death; of his four children, one is a spinner, one a stretcher; one was a spinner till he enlisted for a soldier, and the other is a cabinet maker.

What do you say of the health of the children that you have brought up to factory work?—They have excellent health; it can't be better.

You must have seen great changes both in the spinning and manufacturing processes, and in the population and its character, in these parts; can you compare things then with what they are now?—About the year 1792 I was a spinner on mules turned by hand, and I was paid 3s. a pound for spinning No. 80s, and the number of spindles in Bolton which were running at that time was about twenty-four thousand, turned by hand; upon an average there were then one hundred and sixty spindles upon a mule; one spinner worked upon one mule containing (say) one hundred and sixty spindles, which would give one hundred and fifty spinners employed at that time; the price of spinning since then has kept gradually coming down, and the number of spindles and size of mules gradually augmenting. I cannot justly state in what year I commenced spinning by power, but when I began, which was somewhere about the year 1797 or 1798, I began upon a pair of mules each carrying two hundred and forty spindles. My master, Mr. Carlisle, put up the first power mules in Bolton; there were about sixteen pair of them in master's mill put up at once; then the price for spinning 80s. twist was 1s. per pound; a spinner now spins upon perhaps one thousand spindles, and gets 5d. a pound for 80s. twist.

In 1792 there were, you say, one hundred and fifty spinners; how many should you say there were now?—I will bring you an account to-morrow evening which will answer that question pretty well.*

What are a spinner's money earnings now at 5d. a pound for 80s. twist, compared with what they were either in 1792 or 1798?—They are equally as much now, if not more. I think they are rather more now than then; though this I must say, that the regulations in mills are rather closer than they were then; the hours then were considered to be from six to seven, as they are now; but they are stricter and closer now than they were then.

Did spinners always work by the quantity of work, in your recollection?—Nearly; there was here and there one or two who worked by the week at first.

* The witness brought me the next day the following account:—In Bolton there are seventeen mills; seven hundred and ninety-two spinners are employed in them, and the numbers of mule spindles is five hundred and eighty thousand two hundred and sixteen, and of throstle spindles seven thousand five hundred and eighty.

Bolton, 28th June 1833.

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Were the operative classes ever better off than they are now?—I think about the year 1790 to 1800 hand-loom weavers got from 35s. to 40s. a week; they were better off than spinners then; they now get nine or ten, but some of them not so much as that. Colliers at that time got from 20s. to 25s. a week; they now get about 12s. or 15s.; but the remainder, such as mechanics, joiners, shoemakers, and foundry hands are nearly as good now as then, and spinners and carders a good deal better.

Lancashire District.

Bolton.

Thomas Yates.

When power spinning came in, did it throw the hand spinners out of employ?—No; spinners were very scarce then; families had to come in from different places and learn to spin, and whole families together were sent for by masters.

You have been a witness of the formation of the operative class in these parts; you have seen it grow from nothing into a great body in the space of a few years; how was it recruited; of what was it composed; what were the spinners taken from?—A good many from the agricultural parts; a many from Wales; a many from Ireland and from Scotland. People left other occupations and came to spinning for the sake of the high wages. I recollect shoemakers leaving their employ and learning to spin; I recollect tailors; I recollect colliers; but a great many more husbandmen left their employ to learn to spin; very few weavers at that time left their employ to learn to spin; but as the weavers could put their children into mills at an earlier age than they could put them to looms, they threw them into mills as soon as possible; and many of the weavers children stopped in the mills and learnt to spin; but during the last twelve years weavers have put almost all their children into mills since hand-loom weaving has got so bad.

Do you ever hear of people leaving other occupations now to learn to spin?—No; the masters don't take men from other occupations now.

How long is it since that influx of grown-up men into the spinning branch began to cease?—It did not all break off at a time, but I should say it has ceased for fifteen or twenty years.

Does a spinner of forty or forty-five find any difficulty of getting a new shop if he loses his old one now?—Yes; a spinner of that age may perhaps with difficulty get a place if he is a man of very steady character, but if he be fifty and lose his shop, he may travel the country round and won't get a place.

Will not a child of twelve or thirteen weave at power loom as well as a man of thirty or forty?—Yes; they've not that ingenuity about them that a man of thirty or forty has, but they'll weave as well.

Have children any difficulty of obtaining employment now?—No; they have no difficulty after they have once learned, which takes but a very short time.

Does it not appear to you that the number of children employed in any master's mill increases in a greater proportion than that of grown-up men and women?—Yes, it does.

How do you judge that the average number of spindles on a mule in 1792 was one hundred and sixty; did you keep a memorandum?—No; but I have been about this morning to look at the old mills, and by the size of their gable ends you can tell what was the size of their mules; and some I know had ninety-six spindles, others had one hundred and thirty-two, others one hundred and ninety-two, and a very few had two hundred and four, but very few; I recollect six having two hundred and four, and that is all; and I am sure I have not put the average of spindles on a mule too low at that time when I say it was one hundred and sixty; I can recollect pretty well, and have refreshed my memory to-day by going round to look at the old mills.

What do you think would be the effect of a bill bringing about two relays of children?—I think it would not be a good thing, but a bad thing; it would be very injurious to both master and man: as to workmen, parents cannot keep their children without getting them employ; even if it was to perjure themselves, or thereabouts, they must work; they would change about from mills, and go to fine counts in the morning and coarse counts in the afternoon, or a card-room hand would go to piecing, and a piecer to card-room; they would work, that's my opinion; and if they had not two places to work at, then the other part of the day they'll be out; then they begin to find delight in all sorts of mischief, and therefore I think they'll not like to work at all; for children like play and idleness, and getting into mischief. Some boys and girls that are of a wildish nature, if they were to work only six or eight hours a day, would be running away from work altogether. It would never do at all, never.

Don't you think a spinner, if he were prevented from employing his children or other people's children more than eight hours a day, would get his wife into the mill to help him?—Yes; I'm strongly of that opinion.

What would become of his children at home while he and his wife are in the mill?—Yes, indeed; the children would be in a very poor state indeed.

In the course of your experience during more than fifty years did you ever hear of any plan of relays of children before?—Oh dear! nothing of the sort.

Do you not think that any law that is made should be such as that no person can break it or infringe upon it?—Certainly. One master ought to be on the same footing as another, and so ought the hands that work for him likewise.

Lancashire District. How can that be done, unless you place a restraint upon the moving power?—It can't be done; it's impossible, in my opinion.

Bolton.

Thomas Yates.

This is an account of the weekly expenditure and income of one member of witness's family, delivered in on oath 27th July 1833.

For a father, mother, and two children for one week :

	£	s.	d.		£	s.	d.		
30 lb of loaf bread	-	0	4	2	7 quarts milk	-	0	1	6
8 lb. of beef	-	0	4	4	1 lb. soap	-	0	0	6
20 lb of potatoes	-	0	0	10	$\frac{1}{2}$ lb candles	-	0	0	3
3 lb of butter	-	0	3	0					
$3\frac{1}{2}$ lb. sugar	-	0	1	9		£1	1	7	
2 oz. tea	-	0	0	$7\frac{1}{2}$	Rent	-	0	3	6
2 oz. coffee	-	0	0	$2\frac{1}{2}$	Washing	-	0	2	4
3 lb. flour	-	0	0	6	Fire	-	0	1	0
12 oatcakes	-	0	1	0					
7 quarts ale	-	0	2	11		£1	8	5	

Earnings per week in family - £ 2 10 0

This is the account of the expenditure and income of a man and his wife, both of them are spinners, furnished to me by Thomas Yates, who collected the particulars from the man, and not from the woman; he applied to the man, Matthew——, because he believed him to be one who would tell truth. 27th July 1833.

	£	s.	d.		£	s.	d.
Bread, 20 lb.	-	0	2 11	12 quarts butter-milk	-	0	1 0
Flour, 6 lb.	-	0	1 0	1 lb. soap	-	0	0 6
Sugar, 3½ lb.	-	0	1 9	Candles	-	0	0 3
Butter, 3½ lb.	-	0	2 11	Bacon	-	0	0 7
Tea, 2½ oz.	-	0	0 8½	Rent	-	0	2 0
Beef, 6 lb.	-	0	3 0	Washing	-	0	1 0
Potatoes, 30 lb.	-	0	1 0	Coal	-	0	0 6
Oatcakes	-	0	0 6				
3 quarts of beer	-	0	1 0		£	1	2 1½
7 do. milk	-	0	1 6				

Joint earnings per week - £ 2 10 0

Richard Wilding.

RICHARD WILDING, aged fifty-three, sworn and examined, 28th June 1833.

I am a native of Kirkham in Lancashire; went 'prentice to sail-cloth manufactory in that town at the age of fourteen; continued in it till the age of twenty; then went into the Lancashire militia, and volunteered from that into the artillery, and became drill serjeant at Chatham and Woolwich, and continued in the artillery till the year 1814, when he was discharged at the reduction of the army; some few months after went to Scotland, and conducted different flax-spinning mills there, at Balgony, at Ceries, and at Dundee; returned to England, and in the year 1822 established himself as a wholesale provision merchant in Wigan, where he continued till 1829, at which time he removed to Bolton in the same occupation, which he gave up in consequence of the bad state of the trade, and went into the employ of Mr. Thomasson of Mill Hill near Bolton, at Christmas 1830–31, in the warehouse department; engages himself at present on jobs connected with machinery and mechanical contrivances, and has been working on a job of this kind for Mr. Brooks, mending heckles for the last six weeks at his factory; has a shop likewise for these purposes at his own house.

You told me yesterday, when I entered into conversation with you at Mr. Brooks' manufactory, that you were very much opposed to any measure for shortening the hours of labour; please to state your full opinions on this point?—I am not only against any measure for shortening the hours of labour, but likewise against any one which interferes with labour, either with the labourer or his employer; I think such a measure would be the means of reducing wages, and that it would force the small manufacturer out of the market, and throw the business of manufacturing into the hands of the very large capitalists, and thus ultimately I think it would become injurious to the operatives themselves. If a small manufacturer is working thirteen hours a day, one who has either vested all the money that he could scrape together in building or buying his mill, or one who has taken a lease of a mill by which he is bound to a certain rent, and you cut his power of working his mill from thirteen hours a day down to ten, you deprive him of nearly one fourth of the time for industrious labour; thirteen hours for work was not only a consideration to him when he built or hired the mill, but small manufacturers who are under-capitalized must be injured and ruined in many instances totally. This will make the business run into the hands of large

large capitalists who have the means to increase their buildings and machinery, and this will be injurious to the operatives ultimately, because, the small machinery being ruined, wages must drop from men being out of employ, and the business running into the hands of a few large capitalists, these latter will be enabled to drop wages as they like.

You are a native of this part of the country, but you quitted it about the year 1800, at the time when spinning by power was just coming into general use. Can you give me any information about the manner or way in which the persons who were then being wanted for spinners were procured and collected together by the masters?—The deficiency of hands led the masters to give great wages, and that led the people to transport themselves to these depôts of machinery, and they came in flocks from all occupations, and thus the great mass of operatives was assembled in these depôts. The temptation continued till there was a greater supply of labourers than was needed for the employ; then the masters began to drop their wages. This led to turn-outs, which produced trades-unions. The first trades-unions that I recollect arising from turn-outs were those of hatters and paper-makers; I remember hands belonging to those employments travelling about the country after a turn-out with tickets termed blanks, which entitled them to relief from men of their own trade in employ. Then I remember being recruiting in Leeds about 1804, when a cropping machine was invented, which, after the patent could be procured, greatly abridged labour in that department of woollen cloth making. Then Marshall and Benyon's concern invented heckling machines, and finally operatives in different trades began to form trades unions and raise funds to provide for turn-outs. All the trades have now formed such funds, as far as I know, but I believe the crofters were the last that united. Now the tendency of all this seems to me to be as follows: the discussion of all these matters leads them to be accustomed to discussion and discussing matters in general, and they look into political matters. Now twenty-seven years ago you might sit in a public-house and wait till the crowd had gone off, and you would not have heard one word about political matter or discussion; in short, if a person had introduced a subject of that kind at that time, he would have been considered as a jacobin; but now the case is different; you cannot sit ten minutes in any public-house in this town, or in any other that I am acquainted with, without hearing men discussing politics and other measures of government, and often as rationally as if they were legislators, though probably they could not write five sentences.

Lancashire District.

Bolton.

Richard Wilding.

Read over, 29th June.

What do you think would be the effect upon operative society and upon manufacturing interests of working by means of two sets of hands between the ages of nine and thirteen, each set to work six or eight hours?—Then the adults must work twelve or sixteen hours, and the effect would be this, that the children who worked at A.'s mill in the morning would work at B.'s mill in the afternoon, and, vice versâ, B's hands would work at A.'s mill. It is my firm opinion that there is no means of abridging the hours of labour but by laying a restraint on the moving power.

Then am I to understand that you think that a law for the protection of children against being overworked, by ordaining that there should be two sets of children, would in fact cause them to be as much worked after it was passed as they are at present?—Precisely so; that is already answered.

At the time when you were in Mr. Thomasson's employ his mill worked at night; did you know instances of persons, both parents and children, proffering false certificates as to age?—There were several; I cannot give their names; I dismissed the applicants with contempt.

But you observed a great readiness to falsify?—Yes, yes.

If you were managing a night-working mill to-morrow, and you wanted one hundred hands for piecing, setting on, and carding, and one hundred applications were made to you by persons professing themselves to be above twenty-one, and whose parents were ready likewise to certify and sign to that effect, how many out of such one hundred hands should you from your experience expect would be really above twenty-one?—Not more than twenty.

Then you would expect that the remaining eighty would all be ready and willing to give false certificates?—Yes, there's no doubt of it.

sworn and examined, 2d July 1833.

Is a spinner, but has left spinning for three months, and established himself as a public-house keeper; began factory work as a piecer at billies between six and seven years old at a coarse mill at Hindley belonging to Mr. Wiggins; pieced at billies in several mills in that neighbourhood, and sometimes worked as a card-room hand till about fourteen or fifteen years of age, when he occupied a billy at Mr. Pennington's mill, spinning at it for about two or three years; and at about seventeen years old went to Wigan and began mule-spinning at Mr. Bullock's mill; continued an operative spinner at his mill for about six years, and till it was burnt down, when he came to Bolton and found employment as an operative spinner at Ormerod and Hardcastle's, where he stopped eleven years; from thence he went to spin at Messrs. Ashworth's mill, where he continued seven or eight years, leaving

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Lancashire District.

Bolton.

leaving it only three months since ; married when twenty-one years old a woman who spun at billies.

How many children have you, and what are their ages ?—Seven ; the eldest is a spinner going of twenty-one years ; the second, a girl going of eighteen, has pieced for me all her lifetime till I quitted spinning the other day ; the third is a boy, a piecer ; the fourth a girl, a piecer, turned twelve years old ; the fifth, a boy, goes to school, nearly nine years ; can't tell what I shall make of him ; is a very weakly child ; I don't think he will ever be able to stand factory ; the sixth, a girl, goes to school ; the seventh a baby.

Now I observe by the account that you have given me that you must be acquainted with the whole course of the struggles on the part of the operatives to obtain short-time bills. You were a spinner at Bolton in 1815, and there have been the laws of 1819-25-31 since ; what is it that the operatives really want in the matter ?—Well, the time is too long ; I had no education myself, and I wanted to give my children an education, but they are so fatigued at the end of the day, that they are unfit to learn. Then the machinery is getting to such perfection, so much larger ; I should not have given up spinning if it had not been for that ; but it is too large for one getting to the age that I am ; a mule with five hundred spindles is heavier to put up than one with three hundred. I had been spinning on the large size for the last two years, and I found it tell upon my health. There was a young man at the next pair to me ; he did not mind it ; I wasted in flesh. But what the operatives really want is this ; the occupation is not like that of any other labouring man ; a spinner or a card-room hand cannot get away for a day without great inconvenience ; then the occupation is incessant all day long ; a man is tied to the engine ; he must go along with it, and cannot stop ; this continuing every day and all a man's life, they get peevish at it and want repose. Then the hours have already been shortened, and the operatives have found the benefit of it ; I have worked at one time fourteen and sixteen hours a day, and when I came to work only twelve hours I found my health improve. I know the feeling of the operatives really is, that they want to work no more than a reasonable time in the day, and now they have no means of resisting or settling how much or how long they will work.

Do you think that children are more cruelly treated in mills than they are out of them, as at schools or in any other occupation ?—There is much difference in the treatment of children in different mills ; in a deal of mills they won't allow spinners to beat the children ; I never was a hard beater myself, but I certainly have seen others treat children very severely.

Are not the piecers let out by their parents or guardians to the spinner, and not to the owner of the mill ; are they not the spinner's own private servants, and do not the parents or guardians have their wages ?—Yes, that is the case.

If a parent or guardian finds that a child has been harshly treated, cannot he remove the child from the spinner and find it a better master easily, especially if he chooses to have a few pence less wages every week ; if, for instance, the parent chooses to take 2s. 3d. instead of 2s. 6d., or 4s. instead of 4s. 6d. ?—It's exactly ; but then you see overlookers in mills will meddle with piecers as well as spinners ; they will beat them, too, in some mills ; in others the overlooker scarce looks at the piecer, only blames the spinner.

You have a daughter turned of twelve, and you say that she is now getting 3s. a week for you at piecing ; now, in point of fact, if that girl is really worth 3s. a week, and she were to come home to you this evening crying and saying that her master had ill-treated her, could not you, if you chose to take 2s. 9d. or 2s. 6d. a week for her, get her almost any master that you pleased in the whole town, provided that she were really worth 3s. ?—Oh yes ; we're all sensible of that.

Then, in point of fact, if children are ill-treated in mills, and the parents suffer them to continue under harsh masters when they can get others, are not the parents the persons who are to blame ?—They are certainly to blame in that case.

What can be done in mills to prevent the temperature from being too high, and to secure cleanliness and ventilation ?—When I was in Ashworth's mill, I was oftener before him than any other hand about these matters. Certainly they have taken such pains about temperature and ventilation and cleanliness that it very much increased the health of their hands. Now I tried a month at night-working myself at Thomasson's mill ; nothing you could do could make that mill clean or healthy because the power is never stopped ; it works all the twenty-four hours, and the people must be all dirty, and the rooms filthy and unhealthy ; I could not stand it at all ; I would sooner get 30s. a week in a clean mill than 32s. in a dirty mill, and so would any other man I think. If it were possible to enforce regulations for cleanliness, it would add much to the health and comfort of the operatives, but all laws yet made have been broken. Before you came here there were mills in this town that had not been whitewashed for years.

Is not the law respecting age very much infringed in night-working mills ?—Oh ! they can't get hands for it of the proper legal age. To save themselves from the penalty of the law, the hands will state they are of any age, and they do it regularly.

Now, when you worked at Thomasson's, did you know of any hands there who had certified themselves, and their parents for them as well, that they were above the legal age, and who were yet under it ?—I was only there a month, and was never in the card-room to know what was done there, nor do I know much about it altogether, being there so short a time ;

but I had three piecers who had certified, and two of them falsely; two of mine were not above fifteen years of age, and they had certified they were above eighteen; I went to work at night there, for there was a turn-out at Mr. Ashworth's.

Do you think night work produces a good or a bad effect upon the health and morals of those who follow it?—Certainly bad for health and morals. Look at a young girl of sixteen; she goes to night work, her parents and herself certifying that she is above twenty-one; well, this of itself entangles her, and then she gets entangled further with married men. When I was at it I had to go to bed at six in the morning, and lie till four. I never saw the light of day scarcely, and what could I do to look after my family? It's an impossibility for any man to look after either his children or his health; he's too much overcome by it; and the hands have no heart nor stomach for their victuals when they should be asleep instead of working, and so the night-working hands take to drinking more. I always took drink with me, always beer; spinners can't stand spirits, they always take beer.

Now you are a spinner, and speaking practically, if a law were made that no mill should begin to work before half past five in the morning, or be permitted to work after half past seven at night, which would be just the same as now, viz. fourteen hours, and if, besides this, a law were made that no hand under sixteen years of age should enter the mill till half past seven, could not the spinner, whether spinning fine numbers or coarse, practically speaking, dispense with his scavenger and middle piecer for those two hours, and do pretty well with his big piecer, only provided that his two little piecers came in at half past seven, and so cleaned the machinery while the engine stopped for breakfast?—They might do it very well in fine mills, but in coarse mills it would be rather more cumbersome, because the flyings in coarse spinning settle about the machinery so rapidly that it wants cleaning down at least once an hour spinning any numbers up to 60, and in low numbers the machinery ought to be wiped every half hour. Now I dare say that evidence will displease a deal of persons, because though they are trying to get this bill for children, yet they are perfectly sensible it is for themselves, and I should not like that evidence to be published, because when telling merely truth and facts, it offends some people, and as I am now in the public way it would hurt me in my living to say that.

How could the same thing be managed in the card-room if no hand under sixteen were permitted to come to work till after half past seven, while those above that age began at half past five; would it not be even more easy than in the spinning-room?—Yes, it would, certainly.

You are a spinner who have just left the occupation; are not the hands inclined to agree to a bill which would introduce efficient regulation, so that one man should not be working more than another, and all the masters and all the men be on one and the same footing?—Yes; it's nothing but proper; that is what they want. Let all be under one law, and the time would not so much matter; I am sure the operatives would be glad of an eleven hours bill, provided it were efficient, and no one could break it. I am sure they would.

Is there any way by which a bill can be made efficient but by placing a restraint upon the moving power?—I cannot see by what means it can be done else; there is no other way. Many masters would be glad of it; I am sensible they would; I am for an eleven hours bill, and I am sure the masters would not feel it so much, because they are all enlarging the machinery, and that hour cut off would be made up to them, without their feeling it, by enlarging their machinery.

What do you think would be the practical effect upon the morals and health of children, and upon the condition of the families to which they belong, upon the interests of masters, if a law were passed which enacted that no child up to thirteen years old should work more than eight hours a day, and that all above that age should work the regular hours that the mill works, whatever those hours may be?—The law would never do; it would quite raise a disturbance in the country; I've worked so long in a mill that I know it well. There must be two sets of young hands; it never could be done; there would be a regular disturbance agait with such a law; there never could be any law to give satisfaction but one which places a restraint on the moving power.

Did you ever belong to the operatives committee?—Yes, at the time when they was agait for eleven hours.

JOHN BOLLING Esq. sworn and examined, 2d July 1833.

John Bolling Esq.

I wish to give my evidence; I wish to say, that as I use up in my concern one ninetieth part of the cotton consumed in Great Britain, that I think it is right that I should declare my opinion about a proposed alteration in the law.

First of all, with regard to the beating of children in mills, my rules are these, and I am very strict about them: it is forbidden; but children must be corrected to a certain extent; we will not turn floggers, and when children require severe correction we turn them away, first speaking to the parents several times, in order that they may correct them if they think proper; we allow no beating with straps or ropes, and if a child is beaten, we have the child, the spinner, and overlooker up face to face; but the only trouble that I have about beating in my mills is with the spinners; I cannot always prevent them from doing it to the extent that I wish, for children require correction every now and then, and the difficulty is

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Lancashire District.

Bolton.

John Bolling Esq.

to keep it from being excessive. If the child has been improperly dealt with, I propose to the spinner either to pay a fine for the benefit of the child, or I threaten to send for a warrant and have him up before a magistrate. I have had three cases of this kind in about six months. I have a great number of hands in my employ, about 1,500; I cannot and do not know them all. It never can be the interest of a master that the children should be beaten. The other day there were three children ran away; the mother of one of them brought him back again and asked us to beat him; that I would not permit; she asked us to take him again; at last I consented, and then she beat him; he was a card-room child.

Now, as regards temperature, I really do not know what the temperature of my mills is. It is our own interest to prevent the mills from being too hot, because it costs us money to heat them. The spinners may open the windows when they like in the spinning-rooms, and shut them when they like; the temperature need not be more than moderate; in the card-rooms we send in no steam at all.

Now my opinion is, that whatever bill is passed, it should be a tight one, and such as can never be evaded; it should be equal and efficient; and for this it must be a restriction on the moving power; then if that is not granted, we ought to have a public officer, a warden, and he must enforce the law at his discretion, so as to place all on the same footing as to the hours they work. I think that water mills should not have any privileges of working up time beyond those which steam mills have; and I would restrict every mill whatever to this, that it should never work more than twelve hours a day; in other words, that there should be no fetching up of lost time at all, except on the day on which the loss is made.

Regarding the character of females engaged in cotton mills. My father was a medical man, and he made me study medicine for three years, and I am fond of the subject of medicine. I cannot say conscientiously that I think the females are at all worse in their conduct than those engaged in other occupations, save and except that I think that where a great number of them get together in cotton mills they are not so good as when they are more separated; if there is any difference, it proceeds rather from the business requiring them to be congregated than from laxity of discipline or other incentives to bad conduct, or any thing in the trade itself; the children and the adults are blanched by the confinement in in-doors in artificial temperature, but their health is quite as good as the average in other trades.

MANCHESTER.

JONATHAN AMBRAY, operative spinner, sworn and examined,
4th May 1833.

Lancashire District.

Manchester.

Jonathan Ambray.

This witness called on the 4th of May, and volunteered to give evidence in favour of the Short-time Bill: he gave but an unsatisfactory account of the reasons which had induced him to come forward, and from his manner throughout I felt satisfied that he had a strong wish to take exception at the way in which the Commission received evidence. I forebore therefore to prevent his communications, however irrelevant or unimportant. As, however, they inculpated others, I postponed concluding his examination till the 21st of June (on which day he put in on oath, as part of his evidence, a written document, which he had left at the office of the Commission on the 6th of May); seeking in the meanwhile to obtain something regarding him and those whom he accused.

Is thirty-eight years of age; has been married twice; by the second wife two children, one boy and one girl. First wife was a spinner; died at the age of thirty-three of complicated disease; went off from consumption and dropsy; she wasted away in flesh, and filled with water; opened by Dr. Hall and Dr. Fodding in 1826. Lived at that time in Chorlton Row, Temple Street, a shopkeeper's. Present wife is a housekeeper; the latter child, a girl, is the most healthy. Became a piecer and scavenger in ———'s mill in Stockport at the age of ten years; the spinner engaged and paid him, and this has been the case throughout the whole time of his working as a piecer there or elsewhere; had three sisters working as operative spinners at Jesse Howard's at the same time; one died at the age of fifteen or sixteen of consumption; the second died at about nineteen of consumption; the third died at about twenty-five of consumption. Worked at ———'s to learn the business, but for a very short time; thinks there might have been about one hundred children at ———'s; wages in ———'s mill for children varied from 2s. 6d. to 9s. a week; Mr. ——— used to beat the children who were too late in a morning with a batter's stick, round one inch in circumference, about a yard long, in the yard; generally gave five or six raps across the back till they could get away; never seen him beat them on other occasions. Work about thirteen hours a day; forty minutes for dinner; no stoppage for breakfast; got it as they could. From ———'s went to Thomas Swinster's mill, who was a fine spinner in Stockport; wheels turned by men; remained about one year and a half; his wages about 4s. 6d. as a piecer and scavenger; wages for children from 4s. to 5s. per week; might have been about thirty children employed; has been lifted up from the floor by the hair of the head by the spinner, and beat with hands and kicked; has seen others treated in the same way; hours very long; has begun at four o'clock in the morning and worked till ten at night; generally did this for three days every week; the other three days scarcely worked at all. From Swinster's went to Brown's, a coarse spinner's near Stockport; staid about one year as a piecer; wages from 4s. 6d. to 5s.; about fifty children; wages from 3s. to 9s.; the spinner in whose employ he was flogged him with a rope; ran away in consequence. In some mills the children are beaten without its ever coming to the master's knowledge, in others the masters know it, who in some cases say it cannot be done without; in others have not allowed it when known, threatening to turn the spinners away; has known spinners turned away for doing it, but at the same time the masters, though disallowing beating, have exacted a quantity of work which the spinners cannot execute without it; and if masters turn away spinners for beating children, they must be turning them away every day; thinks the men are necessitated to beat the children, or the quantity of work could not be done; beats his own child who now works under him as a scavenger in Chapple's mill; generally has to beat him two or three times a week to keep him active; a beating sharpens him up for a day or two throughout; the beating is at no particular time of the day, but the first time of the morning is the awkwardest time to get him to buckle to. Went to Peter Marsland's in Stockport, cotton master, as a piecer; wages 6s. 6d. or 7s.; about fifty children from 3s. 6d. to 9s.; staid about one year; spinner a very strict man; was the first in quantity of work; often beat him for different things; and becoming weak in his bladder, often grumbled at him for going to the necessary, for which reason he used to endeavour to retain his urine as long as possible, and has frequently made water in his clothes rather than expose himself to his frowns and abuse; cannot remember that he was ever beaten for going to the necessary; became so weak in the bladder that he could not retain his water in bed; once the spinner kicked him so violently on the rump bone, that for weeks he could not sit down without pain; once gave him a blow on the ear with his hand so violent that he was a month before he recovered his hearing in that ear; Mr. Marsland knew nothing of all this, but he pressed for a quantity of work which could not be got without hands using some sort of severity; hours of work about

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Lancashire District.

Manchester.

Jonathan Ambray.

about thirteen and a half; did not stop breakfast time, and forty minutes allowed for dinner principally occupied in cleaning and oiling. Then being thirteen years old went 'prentice to a tin-plate worker; staid one year and a half; was bound for seven years; went away, the fault being on his side and not on his master's. As a tin-plate worker got heartier and stronger; weakness of bladder abated; time of work much less; work heavier while you are at it, but intervals of repose between it, the factory work being one continued thing. For one year and a half sold muffins about the streets in his sister's employ, who baked them. As a muffin-seller became very healthy. Then went to work at Joseph Lane's in Stockport, cotton master and spinner and manufacturer, as a piecer first, and then as an assistant to the dressers, his wages being partly paid by the dressers and partly by the master; wages altogether 9s.; staid about one year; about seventy children; their wages were from 2s. 6d. or 3s. to 9s. At Lane's was seriously scalded by accident, and the men sent him 7s. one week and 5s. the other; the master sent nothing, though he knew it; this accident happened after he had been six months at Lane's, of which he passed three as a piecer; began to feel weaker than he was before soon after he returned to factory work, but attributed this at the time to want of sufficiency of food, his mother having just died, and provisions being dear (it was about 1816), rather than to factory work, though it might have been that too. From Lane's came to Mr. ———'s mill at Manchester as an odd hand assisting in the spinning-room, and then became a spinner, wages about 16s.; and then went to a larger wheel at same place, and got advanced wages, about 28s.; the master paid the piecers here; wages 7s. 10d. a week; about three hundred or three hundred and fifty children; the master paid all the piecers here; the wages for the piecers were 6s. 6d. all round; about two hundred of them; the scavengers and creel-fillers had about 4s.; were under the employ of masters; staid about four years. Went to Mr. Thompson's at Newcastle in Staffordshire as throstle and mule spinner, at spinner's wages, about 26s. a week; number of children about forty; master paid all the wages of piecers; staid one year. Went to Tatlock and Jones, Stockport, candle-wick spinners, as a spinner; wages about 27s.; from 3s. to 9s.; staid about four months. Came to Thomas Marsden's, cotton (fine) spinners in Manchester, as spinner; wages about 26s. or 27s.; about fifty children; wages about 2s. to 9s.; staid about six months. Kept a provision and drapery shop for four years; buried his wife; failed in business; went to spinning in Moorhouse's mill as cotton spinner, at Rainer near Macclesfield; wages about 16s. or 17s.; about twenty children; theirs from 2s. 6d. to 7s.; staid about two years. Came back to Manchester to Chapple's mill, thread manufacturer, as spinner; wages about 26s.; about sixty small hands; their wages from 2s. to 9s.; staid about two years. Went to Barnes', fine spinners, as spinner; wages about 29s.; about three hundred small hands; all the piecers under the spinners; piecers wages for one out of six 9s.; the remaining five ranged from 3s. to 5s.; the card-room small hands in Mr. Barnes' pay and employ. From Barnes' went to Chapple's mill, a fustian manufacturer, as a spinner, where he has been three years, and is now; wages when at full work about from 30s. to 35s. in summer; about 28s. to 33s. in winter, when 2s. per week being deducted for gas; in the card-room and spinning department from sixty to seventy small hands; does not know how many small hands at the looms; piecers and carders from 4s. to 9s. 6d.; piecers paid by the spinners.

[On Monday, May the 6th, Ambray called and left a paper, of which the following is a copy:]

The next circumstance at Mr. Lane's mill was the drawing-off of boiling sow; the plug came out, being out of repair; I could not put it in again from danger of being scalded; in consequence a load of flour run away, for which the master said I must pay, and stopped me three shillings that week, and resolved to continue the same till paid for, for which I run away and came to Manchester; so I got employment at Mr. ——— mills, in No. 12 room; I witnessed the overlooker to strap children, boys and girls, his own as well as others, in an unmerciful manner, and witnessed acts of seduction both by the overlooker, manager, and master's nephew, which in consequence was practised amongst the hands. In No. 9 room I witnessed frequent floggings with knotted rope by the overlooker on his own and other children; the overlookers as well as the spinners, being paid by the quantity of work, used great tyranny to all the children under them; when I first went there we had no breakfast half hour, which made our time twelve hours and a half per day, but while I worked there the Act for twelve hours was passed; we then stopped a half hour for breakfast. The next mill I worked was Mr. Thompson's, of Newcastle-under-Hill; I never witnessed any severe beatings of the children, but saw great evil with regard to their health and morals from over-hours, they being thirteen per day in general. Next I came to Mr. ———'s, where I witnessed beatings of the children by the spinners, but discouraged by one of the masters, the other not so much so, and witnessed several acts of seduction from one of them.

N.B.—I omitted in its proper place having worked at Raner in Cheshire, but I have nothing to mention but too long hours, which the master lamented at as well as I. I am now at Mr. Chapple's, and have been there three years.

21st June 1833.

Lancashire District.

Manchester.

Jonathan Ambray.

Mr. Ambray wished to put in, on oath, the foregoing document. He stated that there were some delicate points in it relative to seduction, but that he could swear to them.

You state that in Mr. ———'s mills, No. 12 room, you witnessed acts of seduction on the part of the overlooker, manager, and master's nephew; describe the acts?—The overlooker formed a league with another overlooker's wife; he likewise formed a league with a female spinner; the master's nephew formed a league with a female spinner in another room.

How old were the female spinners with whom you say the overlooker formed a league?—She was a married woman too, but her husband had run away, and was near upon thirty years of age.

How old was the female spinner with whom you say the master's nephew formed a league, and what were her weekly earnings?—She was about twenty, and I should think her earnings were about 10s. a week on an average.

How do you know these leagues were formed?—The overlooker whose wife was seduced came to accuse the other overlooker about it, but it was denied and hushed up; afterwards his wife came to the mill, and accused the female spinner of having seen her with her husband.

How do you know she did?—I saw them quarrelling.

How do you know she accused her of that?—It was told along the room by the hands that did hear; I was too far off to hear.

Did you ever hear of such things as those occurring out of mills?—Yes, they are daily occurrences.

Then what has this relation in the document which you put in particularly to do with mills?—They transpired in the mill.

Now, with regard to the master's nephew, how do you know that?—I met him with her after dark, walking.

How long did you stay at Mr. ———'s?—I was there for three or four years altogether.

What year was it you went there, and when did you leave?—I went the latter end of 1817 or beginning of 1818, and left the beginning of 1821 or 1822.

You have been in a great many mills, and always have been changing; what was the reason of your leaving Mr. ———'s?—I believe it was for not doing quantity of work enough.

Were you accused of any misconduct?—No.

Were you dismissed, or did you leave there?—The overlooker told me I should spin no more till I had seen the manager, so I went out; I met the manager going; he asked me why I was going; I told him; he said he would speak to the overlooker about it, but I went away; I had been saucy, perhaps.

Had you sworn at the overlooker?—I can't just remember that, what language I used; it was sharp, in return for his sauce.

Try to remember whether you did not swear at him?—I hardly think I did; I was not in the habit of swearing then.

Will you swear that you did not swear at him?—No, I shall not swear that, sir.

Will you swear that you did not swear at him a great deal?—Yes; I think I hardly swore at all, but I will not swear it.

Will you swear you were not dismissed for misconduct?—Yes.

Why were you removed from No. 9 spinning room to No. 17?—I worked under a brother-in-law, and we had words.

Why did the overlooker remove you?—I wished it.

Did you wish to remove from large wheels to small?—There was very little difference in the size.

Please to answer the question?—It was not on account of the size.

Can a spinner get as much on a small wheel as he can on a large?—No; we could not there, nor they cannot in general.

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Lancashire District.

Manchester.

Jonathan Ambray.

Did you come here at the suggestion of the Short Time Committee?—No, sir.

Did you speak to any of them about coming here?—Yes.

When I had finished the examination, Mr. Ambray said:—Can I be prosecuted for any thing I have said, because I understand truth is libel? If so, I would erase any thing scandalous from my evidence.

Evidence read over to Mr. Ambray.

N.B.—I have seen the books of the mill in which the above-named witness says that these transactions took place, in which there is an entry, under date 30th April 1821, that he had been discharged for misconduct, but the overlooker and manager being both dead, the point cannot be ascertained; but he had been previously removed from large wheels to small, which, according to the rules of the mill in question, is a degradation, besides involving a diminution of weekly earnings. The mill in question is one of the best regulated in Manchester.

THOMAS SOMERFIELD, sworn, and examined by JOHN W. COWELL,
22d June 1833.*

Lancashire District.

Thomas Somerfield

Age twenty-seven (the 17th of this month); has been a carder in Mr. Ewart's employ ever since he was seven years old; was not quite seven when he first went; is now overlooker of one card room, in which there are thirty-eight hands; now gets 30s. a week.

Do adult men who are carders get as much earnings as men of the same age who are spinners?—I think they come near to same earnings on an average.

What is your opinion about the shortening the hours of labour?—I think sixty-nine hours a week the best time for labour, and no more and no less, provided that is made binding for all masters. I came by a mill the other night and found it working till nine o'clock; I don't know at what time it started.

At what hour do you suppose that mill started?—I cannot say of my own knowledge, but I believe it started either at half past five or six.

What is the opinion of the hands in your mill with respect to reducing the hours of labour below sixty-nine?—I have asked all the hands in my room; I did not go anywhere else; and they don't want the hours shortened; they are aware that if their hours are shortened their wages will be shortened. But I must say Mr. Ewart is very particular to prevent irregular working, and all masters ought to be the same.

I was in Mr. Ewart's mill to-day during the dinner-time, and I found the spinners kept the piecers back a quarter of an hour and more after the engine stopped, to clean; this I consider irregular; is it the fault of the overlooker?—No, sir; it must be the spinners fault.

Are any means taken to prevent the flyings in Mr. Ewart's card-room?—Yes, we have a fan.

Do you not think that the dust and flyings of a card-room must be prejudicial to health? Yes, I don't doubt but what it is, and the only method hands has to take who works among it is to take an emetic; I have to do it frequently.

Do other card-room hands do that; for I never heard of the custom before?—It is a thing much practised among carders who have knowledge of what is good for their health.

Do you think you vomit any cotton?—I have often thought so.

What age are carders when they leave off work?—I have known them work to sixty, but the general age is about fifty odd. I don't think that carding shortens life, with care and sobriety; but I have known them to die early, though I don't think they die earlier than others.

Is there any thing else you would wish to say?—I have an objection against one of those charges brought against the hands in cotton-mills; that is, respecting drunkenness and immorality. I believe there is more prevails among certain mechanical trades than in cotton-mills; such as cutlers, shoemakers, and indeed mechanics in general.

What do you mean by immorality?—Wickedness; such as cursing and swearing, drunkenness, and taking from their families by drinking what their families ought to have; and then as respects that infamous charge brought against females in factories.

What charge?—That the greater part of the females working in factories are not chaste. I say that is not true of young women in cotton-mills. The reason I speak of that is, I married a female out of a factory myself; an honest, steady, prudent, religious female; and I can find plenty that have done so too, sir; and there is those to be found in cotton-mills steadier and religiouser (*sic*) females than there is in many other businesses in which women work.

But don't you think that the indecent language that they hear in mills is a great injury to them?—Sir, I am of this opinion, that many of them hear worse language at home and out of mills. If parents could learn that happy art of setting a good example to their children it would be a great deal better. I, as an overlooker, don't allow any to use bad language in the room if I know it, and they never will do it in my hearing. Then it is said that children of 15, 16, and 17 years of age are driven to the dram shops through faintness and excess of labour. It is abominable, sir; it is not true, sir; I have had events coming under my own sight where parents go to dram shops, and when children come home at night they have had to seek their parents there. I have no more to say upon that. It is not through faintness and excess of labour that they go to dram shops; it has been an enemy to work that has stated it. Its an awful sight to see parents take their children to those shops before they can walk; they may well find the road there afterwards, but the fault is with the parents.

What would be the effect in a card-room of not suffering the hands under fourteen to work more than eight hours a day?—It would excite more poverty than there is; it would not do at all, sir.

* Forwarded to the Central Board on 24th June 1833.

Lancashire District.

Thomas Somerfield.

How many hands under fourteen are there in your card-room?—I suppose I've about seven.

What would be the effect of their leaving off work between three and four o'clock?—What is to be done, sir? I don't know who must do their work if they are away; and if I have seven under fourteen years old in my room, I suppose other carders has a similar number in such rooms. I don't know what would be done; all must stop unless they got two sets of young hands; and where they are to get them I don't know; and if they did, it would come to the old hands working longer time than they do now. Before I was eight years of age I worked from half-past five every day to eight at night, and I dare say I am as competent to work now as many that started at fourteen and sixteen.

You look to me to be thin and weak?—I don't know; I enjoy a pretty good state of health.

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D. 2.

Lancashire District.

APPENDIX to the EXAMINATIONS taken by MR. TUFNELL.

Gentlemen,

London, 1st October 1833.

D. 2.

Lancashire District.

Appendix.

In answer to your inquiry whether I have any statistical papers which might be printed in your next Report, I beg to transmit the following tables. They do not for the most part immediately refer to the subject of the labours of this Commission, but perhaps this will not be deemed a sufficient reason for the non-publication of papers which may serve important statistical purposes. The first table, relating to Belgian manufactures, was furnished to me by the same gentleman who answered the queries printed in the concluding sheet of the Second Report. The column headed "Difference," in the second table, may be considered as denoting the progress of machinery in the cotton manufacture during the last thirty years. As the first number in this column is 20.2*d*. and the last 5.37*d*., it would follow that cotton-spinning machinery is now nearly four times as efficient as it was thirty years ago. This conclusion, however, is not quite accurate, at least for the numbers that are given since 1825, as from that period the prices of yarn have been frequently insufficient to pay the cost of production, owing to the universal introduction of power-looms. This paradoxical result has been brought about in the following way:—previous to the invention of power-looms, hand-loom weavers were the principal purchasers of cotton yarn; but when the power-loom was introduced, the manufacturing of cloth, by its assistance, did not form a separate business, as in the hand-loom trade, but was carried on under the same roof with the spinning of cotton, the manufacturers of yarn having added power-looms to their spinning machinery. The hand-loom weavers, of course, could not work against the competition of the steam-looms, or if they did continue to earn a scanty subsistence from their business, they could only do so by giving a far lower price for the thread they made use of than before; the consequence was, that there were hardly any buyers of yarn in the market, and the price was reduced so low that the profits of the makers of it were almost annihilated; many of them have been brought to bankruptcy; and of late years those cotton-spinners only have driven a profitable trade, who have added power-looms to their spinning establishments. I have thought it necessary to give this explanation, not only with reference to the second table, but also to the third, from which very erroneous conclusions respecting the condition of the cotton trade may be otherwise drawn. It will be perceived that the factory to which that table refers is solely for spinning. This does not prove that the cotton business has been profitless for the last few years, but simply that the mode of conducting it profitably has changed, and that those who have kept to the old method of proceeding have suffered severely. I have also added a glossary of the principal terms used in the cotton trade, as others may experience the difficulty, which I have frequently felt myself, in understanding, without some such assistance, the complicated processes of this manufacture. It will be found, I believe, more accurate than any before published.

I have the honour to be

Your obedient servant,

E. CARLETON TUFNELL.

The Central Board of
Factory Commissioners.

(D. 2.)

A a

TABLE I.

COTTON MILL EXPENCES in general in GHENT.

[Under this head is included the salaries of the clerks, foremen, and of every person employed in the mill, oil for the machinery, ropes, coals, the work done by the carpenters, together with any other expence relative to the machinery and to the rent of the establishment.]

		Number and Cost of the Yarn.								
Denomination	-	10	15	20	25	30	35	40	45	50
		<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
		<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>
Carding	-	.5125	.575	.6375	.65	.7125	.775	.8375	.9	.9625
Drawing & Roving	-	.38	.385	.39	.395	.4	.405	.41	.415	.42
Spinning	-	.6	.7	.8165	1.083	1.3	1.5165	1.733	1.95	2.1665
		1.4925	1.66	1.844	2.128	2.4125	2.6965	2.9805	3.265	3.549
General Expences		.7565	.8345	.987	1.139	1.292	1.3945	1.547	1.7	2.027
West per lb.	-	2.249	2.4945	2.831	3.267	3.7045	4.091	4.5275	4.965	5.576
Extra Twist *	-	.075	.1125	.15	.1875	.225	.2625	.3	.3375	.375
Twist per lb.	-	2.324	2.607	2.981	3.4545	3.9295	4.3535	4.8275	5.3025	5.951
(continued)										
Denomination	-	55	60	65	70	75	80	85	90	
		<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	
		<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	
Carding	-	1.025	1.0875	1.1	1.1625	1.225	1.2875	1.35	1.4125	
Drawing & Roving	-	.425	.43	.435	.44	.445	.45	.455	.46	
Spinning	-	2.383	2.6	2.8165	3.033	3.25	3.45	3.6665	3.883	
		3.833	4.1175	4.3515	4.6355	4.92	5.1875	5.4715	5.7555	
General Expences		2.3045	2.632	2.9095	3.337	3.6145	3.942	4.169	4.396	
West per lb.	-	6.1375	6.7495	7.261	7.9725	8.5345	9.1295	9.6405	10.1515	
Extra Twist	-	.4125	.45	.4875	.525	.5625	.6	.6375	.675	
Twist per lb.	-	6.55	7.1995	7.7485	8.4975	9.097	9.7295	10.278	10.8265	

The expence of hand-work for dressing the warp is one farthing per lb. I do not mention the cost of the starch, because it increases the weight of the warp, and that is reckoned in the calico.

DIRECTIONS for finding the EXPENCE of REELING per lb.

It is now customary to pay 8*d.* for 20 hanks, and each hank, whatever may be its strength, makes two numbers; thus, No. 10 contains 5 hanks, No. 15 contains 7½, and No. 20 contains 10 hanks, the others in proportion.

The circumference of the reel is 64⅔ inches, 560 revolutions of the reel make one small hank (échevette), and 10 of these make a hank (echevaux), so that each hank contains 5,600 revolutions of the reel = 360,000 inches or 10,000 yards.

The yarn is proved by the weight of 4 lbs. 14⅔ oz.

Thus, 10 hanks of No. 20 } weigh 4 lbs. 14⅔ oz., and since the reeling is paid by the
15 do. No. 30 } twenty hanks the workmen must reel
20 do. No. 40 }
lbs. oz.
20 hanks or 4 14⅔ of No. 40. }
20 do. 6 8⅔ of No. 30. } for 8*d.*, and from this I have the following table.
20 do. 9 12¼ of No. 20. }

* Cotton that is used for *warp* requiring to be harder twisted than when used for *weft*, and the machine consequently being able to do less work, an addition is made to the cost of spinning it for putting in more twist, or "extra twist."—E. C. T.

No. of the Yarn.	Weight of 20 hanks.	Cost per lb.	No. of the Yarn.	Weight of 20 hanks.	Cost per lb.	No. of the Yarn.	Weight of 20 hanks.	Cost per lb.
	lbs. oz.	d.		lbs. oz.	d.		lbs. oz.	d.
18	10 14 ² / ₅	.7335	32	6 1 ³ / ₅	1.307	46	4 4 ⁴ / ₅	1.8775
20	9 12 ⁴ / ₅	.816	34	5 12 ⁴ / ₅	1.389	48	4 1 ⁷ / ₅	1.9605
22	8 14 ² / ₅	.8985	36	5 6 ² / ₅	1.4705	50	3 14 ¹ / ₅	2.0405
24	8 2 ¹ / ₅	.98	38	5 2 ¹ / ₅	1.55	52	3 12 ⁴ / ₅	2.1275
26	7 8 ¹ / ₅	1.061	40	4 14 ² / ₅	1.6325	54	3 9 ² / ₅	2.2095
28	7 0	1.14	42	4 10 ¹ / ₅	1.7665	56	3 8	2.2855
30	6 8 ⁸ / ₅	1.2265	44	4 7 ⁹ / ₅	1.7935	58	3 6 ² / ₅	2.367

Lancashire District
Appendix.

The drawing-in * (l'ourdissage) costs $\frac{3}{10}d.$ for 100 threads ; thus a warp of 2,240 threads costs $6\frac{1}{2}\frac{1}{5}d.$, and others in the same proportion.

Formerly No. 2,000 contained 1,840 threads, and was $\frac{5}{4}$ ths in breadth, and the reed had 2,100 dents; now the reed has 2,000 dents, and the warp contains 1,740 threads; which is more advantageous than the former method.

Weft of Nos. 12, 14, 16, 18, &c. may be employed by making use of the coarser numbers, when the piece is required to be heavier, but then the article will be of an inferior quality.

TABLE for the manufacturing of CALICOES, — HAND-WEAVING.

Designation.	No. of Yarn.		Yards.	Weight.		Cost of Weaving per warp.		Cost of Weaving per cut.		Remarks.
	Warp.	Weft.		Warp.	Weft.					
				lbs. oz.	lbs. oz.	s. d.	s. d.			
2,000 - $\frac{4}{4}$	30	14	54 ¹ / ₅	3 9 ³ / ₅	7 9 ³ / ₅	12 9 ¹ / ₂	3 2 ¹ / ₄	} with a reed of 2,000.		
— - $\frac{5}{4}$	-	-	-	4 6 ² / ₅	10 3 ¹ / ₅	14 4 ³ / ₄	3 7 ¹ / ₅			
— - $\frac{6}{4}$	-	-	-	6 9 ³ / ₅	11 6 ² / ₅	16 0	4 0			
— - $\frac{7}{4}$	-	-	-	8 0	13 3 ¹ / ₅	17 7 ¹ / ₅	4 4 ³ / ₄	} - - - 2,100.		
2,400 - $\frac{4}{4}$	-	36	-	3 11 ¹ / ₅	6 0	16 0	4 0			
— - $\frac{5}{4}$	-	-	-	4 12 ⁴ / ₅	6 12 ⁴ / ₅	17 7 ¹ / ₅	4 4 ³ / ₄			
— - $\frac{6}{4}$	-	-	-	5 12 ⁴ / ₅	7 9 ³ / ₅	19 2 ¹ / ₄	4 9 ¹ / ₂	} - - - 2,400.		
— - $\frac{7}{4}$	-	-	-	7 1 ³ / ₅	8 3 ¹ / ₅	21 7 ⁴ / ₅	5 9 ¹ / ₂			
— - $\frac{8}{4}$	-	-	-	8 3 ¹ / ₅	8 12 ⁴ / ₅	26 4 ³ / ₄	6 7 ¹ / ₅			
— - $\frac{9}{4}$	-	-	-	9 6 ² / ₅	9 6 ² / ₅	31 2 ¹ / ₄	7 9 ¹ / ₂	} - - - 3,000.		
3,000 - $\frac{5}{4}$	40	46	52 ² / ₅	5 0	6 1 ³ / ₅	20 0	5 0			
— - $\frac{6}{4}$	-	-	-	6 3 ¹ / ₅	6 11 ¹ / ₅	24 0	6 0			
— - $\frac{7}{4}$	30	10	54 ² / ₅	5 9 ³ / ₅	9 9 ³ / ₅	17 7 ¹ / ₅	4 4 ³ / ₄	} - - - 2,400.		
— - $\frac{8}{4}$	22	6	46 ² / ₅	4 8	13 8	12 9 ¹ / ₂	3 2 ¹ / ₄			

The 2,000 $\frac{5}{4}$ with a reed of 2,100 should have 1,840 threads }
do. do. 2,000 do. 1,740 do. } the $\frac{6}{4}$ and $\frac{7}{4}$ are in proportion.
The 2,400 $\frac{5}{4}$ 2,240 threads, $\frac{6}{4}$ 2,680, $\frac{7}{4}$ 3,000, $\frac{8}{4}$ 3,500, and $\frac{9}{4}$ 3,900.
The 3,000 $\frac{5}{4}$ with a reed 3,000 should have 2,800 threads } The wider and narrower in
do. do. 3,200, do. 3,000 do. } same proportion.

CALCULATION on the COST of YARN.

SURATTE.

Twist or warp, per lb.	-	d. 6.5	Weft, per lb.	-	-	-	d. 6.5
15 ⁰ / ₁₀₀ waste	-	.975	15 ⁰ / ₁₀₀ waste	-	-	-	.975
		7.475					7.475
Spinning expences, No. 20	2.832		Spinning expences, No. 22	2.931			
Extra twist	-	.15					
Cost of the warp, per lb.	-	10.457	Cost of the weft, per lb.	-	10.406		

* The meaning of "drawing in" is the drawing the ends of the threads of warp through the healds and reed previous to its being put into the loom.—E. C. T.

GEORGIA.

Lancashire District.

Appendix.

	<i>d.</i>		<i>d.</i>
Twist or warp, per lb.	- 7.6	Weft, per lb.	- 7.6
10% waste	- .76	10% waste	- .76
	<u>8.36</u>		<u>8.36</u>
Spinning expences, No. 30	3.7045	Spinning expences, No. 36	4.091
Extra twist	- .225		
	<u>12.2895</u>	Cost of the weft, per lb.	- 12.451
Cost of the warp, per lb.			

LOUISIANA.

	<i>d.</i>		<i>d.</i>
Twist or warp, per lb.	- 8.6	Weft, per lb.	- 8.6
8% waste	- .688	8% waste	- .688
	<u>9.288</u>		<u>9.288</u>
Spinning expences, No. 40	4.5275	Spinning expences, No. 45	4.965
Extra twist	- .3		
	<u>14.1155</u>	Cost of the weft, per lb.	- 14.253
Cost of the warp, per lb.			

VALUE of the YARN from the above CALCULATION.

Quality.	Warp.	Weft.	
	<i>d.</i>	<i>d.</i>	
Suratte - -	10.457	10.406	The prime cost of the cotton, and the different qualities of the yarn, prevent me making a general calculation.
Georgia - -	12.2895	12.451	
Louisiana - -	14.1155	14.253	

Cost of a piece of calico 2,000 $\frac{1}{4}$ with 1,740 threads. The warp of No. 30, Georgia, and the weft of No. 12 waste, weighing 14 lbs. 9 $\frac{3}{4}$ oz., and 90 yards long:

Warp, Georgia, No. 30, 4 lbs. at 12.2895 = 49.158

No. 12, weft of waste, per lb. - 5
 20% loss - - - 1
6

Spinning expences 2.25 10 6 at 8.25 = 87.45

Cost of the piece 2,000 $\frac{1}{4}$ - 136.608 = 11 4.608

Weft of No. 14, 16, and 18 is sometimes used for this quality.

With No. 14 a piece weighs 14 0 viz. 4 for the warp, and 10 0 the weft.
 With No. 16 do. 13 3 $\frac{1}{2}$ - 4 do. 9 3 $\frac{1}{2}$
 With No. 18 do. 12 0 - 4 do. 8 0

The yarn of the above piece costs - 136.608
 Dressing $\frac{1}{4}$ d. per lb. - 1
 Reeling - - - 1.2265
 Drawing in - - - 2.61
 Weaving - - - 43.2

184.6445
 Discount 2% - 3.69289

Cost of the piece 54 $\frac{1}{2}$ yards long 188.33739 = 15/8.33739

TABLE II.

AVERAGE PRICE of COTTON compared with TWIST sold.

Lancashire District.

Appendix.

	Cotton per lb.	Twist sold per lb.	Average Number.	Difference.
	d.	d.		d.
From December 1802 to December 1805 -	19.6	39.8	25.9	20.2
- — 1805 - — 1806 -	19.08	36.18	25.	17.1
- — 1806 - — 1807 -	21.54	36.70	25.78	15.16
- — 1807 - — 1808 -	24.83	38.	24.61	13.17
- — 1808 - — 1809 -	26.83	41.91	24.37	15.08
- July 1809 - — 1809 -	20.73	37.01	24.69	16.28
- December 1809 - July 1810 -	20.93	40.79	22.97	19.86
- July 1810 - December 1810 -	19.75	38.51	22.96	18.76
- December 1810 - July 1811 -	17.96	34.40	23.09	16.44
- July 1811 - December 1811 -	17.43	28.71	23.59	11.28
- December 1811 - July 1812 -	17.81	29.72	23.15	11.91
- July 1812 - December 1812 -	18.24	29.09	24.45	10.85
- December 1812 - July 1813 -	24.75	35.46	25.22	10.71
- July 1813 - December 1813 -	25.12	35.08	25.52	9.96
- December 1813 - July 1814 -	33.52	46.92	25.06	13.40
- July 1814 - December 1814 -	31.67	45.40	26.	13.73
- December 1814 - July 1815 -	25.72	37.48	23.65	11.76
- July 1815 - December 1815 -	26.53	38.44	25.	11.91
- December 1815 - July 1816 -	20.47	37.74	25.4	17.27
- July 1816 - December 1816 -	20.73	33.8	25.3	13.07
- December 1816 - July 1817 -	22.3	34.65	25.7	12.35
- July 1817 - December 1817 -	20.44	33.6	25.46	13.16
- December 1817 - July 1818 -	20.46	34.55	25.6	14.09
- July 1818 - December 1818 -	21.13	32.95	23.4	11.82
- December 1818 - July 1819 -	14.49	30.85	24.53	16.36
- July 1819 - December 1819 -	13.65	27.53	24.95	13.88
- December 1819 - July 1820 -	14.44	26.03	25.70	11.59
- July 1820 - December 1820 -	11.62	21.40	25.18	9.78
- December 1820 - July 1821 -	9.82	20.11	25.73	10.29
- July 1821 - December 1821 -	9.91	19.45	25.53	9.54
- December 1821 - July 1822 -	9.23	19.27	25.54	10.04
- July 1822 - December 1822 -	8.34	19.14	25.6	10.8
- December 1822 - July 1823 -	7.8	19.23	25.6	11.43
- July 1823 - December 1823 -	8.24	19.63	25.34	11.39
- December 1823 - July 1824 -	8.81	19.41	25.9	10.6
- July 1824 - December 1824 -	8.78	19.09	26.1	10.31
- December 1824 - July 1825 -	14.	22.34	26.2	8.26
- July 1825 - December 1825 -	13.06	19.11	29.1	6.05
- December 1825 - July 1826 -	7.6	16.5	27.73	8.9
- July 1826 - December 1826 -	6.82	15.17	30.	8.35
- December 1826 - July 1827 -	6.95	14.97	30.95	8.02
- July 1827 - December 1827 -	7.34	14.77	30.	7.43
- December 1827 - July 1828 -	6.26	13.	27.41	6.74
- July 1828 - December 1828 -	6.64	13.3	28.33	6.66
- December 1828 - July 1829 -	6.23	12.96	28.23	6.73
- July 1829 - December 1829 -	6.34	13.43	29.69	7.09
- December 1829 - July 1830 -	7.01	13.28	27.85	6.27
- July 1830 - December 1830 -	6.82	12.72	26.77	5.90
- December 1830 - July 1831 -	6.65	12.82	28.58	6.17
- July 1831 - December 1831 -	6.82	12.37	27.40	5.55
- December 1831 - July 1832 -	6.97	12.76	29.43	5.79
- July 1832 - December 1832 -	7.24	12.61	29.52	5.37

Furnished by Samuel Greg & Co., not from their own mills, but they can vouch for its being accurate.

(D. 2.)

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Lancashire District.

Appendix.

TABLE III.

The following table, the accuracy of which may be relied on, exhibits an account of the condition which a cotton factory was found to be in when the expences and profits were calculated, as is customary, every half year, for the last four years. The original cost of the establishment was 40,000*l.*; it contains 10,932 throstles, and employs 380 workpeople. During the nine last years 442,000 lbs. have been spun on an average each half year, and 8,577*l.* paid to government as duty on cotton in that time.

Perhaps a little explanation may make the table clearer. The second column contains the price that was given for the cotton per pound at each period; the third, the loss sustained in spinning a pound weight; the fourth, the expences of fixed and circulating capital incurred in spinning the same quantity; the fifth, the whole cost of production; and the sixth, the price at which the article was sold. The difference between the fifth and sixth columns constitutes the profit or loss in converting a single pound of raw cotton into thread; and the result, as respects the whole quantity manufactured in each half year, is given in the two last divisions of the table. It will be apparent how very delicately the balance is held between profit and loss, depending sometimes on the fiftieth part of a penny in the value of a pound of cotton. It is also worthy of remark that the trivial addition to the cotton duty in 1831 had apparently the effect of instantly causing the loss to mount up to 1,589*l.*, or to nearly four times what it had been in the preceding half year.

	Price of Cotton per lb.	Waste.	Wages, Rent, &c.	Cost of Production.	Sale Price.	Profit.	Loss.
1829:	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	£ s. <i>d.</i>	£ s. <i>d.</i>
March -	-	-	-	-	-	-	660 11 11 $\frac{1}{4}$
September	5.161	.65	4.93	11.20	11.22	147 9 8 $\frac{3}{4}$	—
1830:							
March -	5.70	.65	4.65	11.	11.10	113 5 2 $\frac{3}{4}$	—
September	6.43	.59	4.39	11.41	11.42	161 6 3 $\frac{1}{4}$	—
1831:							
March -	7.03	-	4.49	11.42	11.19	- - -	406 7 8
September*	5.98	.75	4.47	11.20	10.53	- - -	1,589 2 11 $\frac{3}{4}$
1832:							
March -	5.50	.68	3.62	9.80	10.12	414 6 8 $\frac{1}{2}$	—
September†	6.48	.54	3.72	10.75	10.23	- - -	1,012 3 9
1833:							
March -	7.	.65	3.75	11.40	10.50	- - -	1,687 17 9 $\frac{1}{2}$

* New duty imposed equal to fully $\frac{1}{4}$ *d.* per lb.

† Deduction of rent was made from 2,046*l.* to 1,250*l.* on a valuation made conformable to the depression of the times.

TABLE IV.

TABLE of the AVERAGE PRICES of 40s Yarns per lb. made from Pernams, Marenhums, Orleans, and Bowed Cotton; of the Average Price of a Calico $\frac{7}{8}$ 72, Stockport Count, weighing not less than 5 lbs. 2 oz.; and of the Prices paid for weaving the Cloth; in each of the following Years.

	Cotton per lb.	Price of Cloth per Piece.	Cost of weaving.*		Cotton per lb.	Price of Cloth per Piece.	Cost of weaving.*
	<i>d.</i>	s. <i>d.</i>	s. <i>d.</i>		<i>d.</i>	s. <i>d.</i>	s. <i>d.</i>
1820 -	12 $\frac{1}{2}$	16 0	1 10	1827 -	7	10 0	1 6
1821 -	10 $\frac{7}{8}$	15 3	1 10	1828 -	7 $\frac{1}{4}$	9 6	1 6
1822 -	9 $\frac{1}{10}$	14 9	1 10	1829 -	6 $\frac{1}{4}$	8 8	1 4
1823 -	10	14 0	1 10	1830 -	7 $\frac{1}{2}$	8 9	1 4
1824 -	10 $\frac{1}{2}$	14 0	1 10	1831 -	6 $\frac{5}{8}$	9 0	1 4
1825 -	12 $\frac{5}{8}$	16 0	1 10	1832 -	7 $\frac{3}{8}$	8 3	1 4
1826 -	8 $\frac{3}{10}$	10 6	1 6	May 1833	8 $\frac{3}{8}$	7 10 $\frac{1}{2}$	1 4

* 72 $\frac{7}{8}$ Power-loom cloth.

Manchester.

JOHN HOWARD.

TABLE V.
COMPARATIVE COST OF COTTON YARN in 1812 and 1830.

Lancashire District.
Appendix.

Hanks per day per spindle.			Price of Cotton and Waste per lb.		Labour per lb.		Cost per lb.	
Number.	1812.	1830.	1812.	1830.	1812.	1830.	1812.	1830.
			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
40	2.	2.75	1 6	0 7	1 0	0 7¼	2 6	1 2¼
60	1.5	2.5	2 0	0 10	1 6	1 0½	3 6	1 10½
80	1.5	2.	2 2	0 11½	2 2	1 7¼	4 4	2 6¾
100	1.4	1.8	2 4	1 1	2 10	2 2½	5 2	3 3¾
120	1.25	1.65	2 6	1 4	3 6	2 8	6 0	4 0
150	1.	1.33	2 10	1 8	6 6	4 11	9 4	6 7
200	.75	.90	3 4	3 0	16 8	11 6	20 0	14 6
250	.5	.5	4 0	3 8	31 0	24 6	35 0	28 2

TABLE VI.

HAND-LOOM WEAVING.

A LIST of the AVERAGE PRICE given by me for the weaving of a 3/74 piece in each year, from 1815 to the present time.

			s.	d.				s.	d.			
Year	{	1815	Price	4	3	}	Year	{	1825	Price	2	1
		1816	—	3	6				1826	—	1	4½
		1817	—	3	0½				1827	—	1	8
		1818	—	3	4½				1828	—	1	7½
		1819	—	2	10½				1829	—	1	2¼
		1820	—	2	9				1830	—	1	6
		1821	—	2	10½				1831	—	1	7
		1822	—	2	6				1832	—	1	3
		1823	—	2	3				1st June } —	1	4½	
		1824	—	2	1½							

The 3/74 which in 1815 was 33 brs.* wide, and each warp of four pieces contained 8 lbs. of weft, has gradually deteriorated to 32 brs., and 6 lbs. 10 oz. of weft. I conceive, that from the improvement in the material before it gets to the weaver, and the reduction in the quality of the piece, that a person will weave at the present time at least three pieces in the time which in 1815 it would require to weave two pieces.

Long Holme, }
17th June 1833. }

THOMAS KAY.

* A "bier" contains a certain number of threads of warp, but the number varies in different parts of the country. In this table 33 biers means a width of 27 inches.—E. C. T.

FACTORY COMMISSION:

TABLE VII.

The PRICE of COTTON from January 1819 to May 1833, declaring the Price in each Month, also the Average Price at the close of each Year.

	1819.			1820.			1821.			1822.			1823.		
	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.
January -	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
February -	—	—	19 $\frac{3}{4}$ 20 $\frac{1}{4}$	—	—	—	9 $\frac{1}{4}$ 10 $\frac{3}{4}$	11	—	—	11 $\frac{3}{4}$ 11 $\frac{3}{4}$	10 $\frac{1}{2}$	—	—	10 $\frac{3}{4}$
March -	—	16 $\frac{1}{2}$	17 $\frac{1}{2}$	—	13 $\frac{1}{4}$	—	9 $\frac{1}{4}$ —	—	—	—	11 $\frac{3}{4}$ 11 $\frac{3}{4}$	—	—	—	—
April -	—	16	17	—	—	—	10 $\frac{1}{2}$ 11	—	—	—	11 $\frac{1}{4}$ —	—	—	—	—
May -	—	14 $\frac{1}{2}$	15 $\frac{3}{4}$ 15 $\frac{1}{2}$	—	13 12	15	—	—	12 $\frac{1}{2}$ 12 $\frac{1}{2}$	—	11 —	10 $\frac{1}{2}$ 10 $\frac{1}{2}$	—	—	10 $\frac{1}{4}$
June -	—	13	—	—	—	15 $\frac{1}{4}$	10 $\frac{1}{4}$ —	—	12 $\frac{1}{2}$	9 $\frac{1}{4}$ 11 $\frac{1}{4}$	11 $\frac{1}{4}$ 10 $\frac{1}{2}$	10 $\frac{1}{2}$ 9 $\frac{1}{2}$	8	—	10 $\frac{3}{4}$
July -	—	—	16 $\frac{1}{4}$	—	13	14 $\frac{3}{4}$	10 $\frac{1}{4}$ —	—	—	9 $\frac{1}{2}$ 11	11 —	9 $\frac{1}{2}$ 10 $\frac{1}{2}$	—	10 $\frac{1}{4}$	11 $\frac{1}{2}$
August -	—	14	16 $\frac{1}{2}$	—	13	14 $\frac{1}{2}$	—	12	11 $\frac{7}{8}$	7 $\frac{3}{4}$ 9 $\frac{5}{8}$	10 9 $\frac{1}{2}$	—	—	—	—
September -	—	—	—	11 $\frac{1}{4}$	—	13 $\frac{1}{2}$	10 $\frac{1}{4}$ 11 $\frac{3}{4}$	12 $\frac{1}{4}$	12 $\frac{1}{4}$	—	—	—	—	—	—
October -	—	—	—	—	—	—	10 $\frac{1}{8}$ —	11 $\frac{7}{8}$	11 $\frac{7}{8}$	—	9 $\frac{1}{2}$ —	—	—	—	—
November -	—	—	—	—	—	12 $\frac{1}{2}$	—	—	—	—	—	10 $\frac{1}{2}$	—	10 $\frac{1}{2}$	—
December -	—	14	—	—	—	13	9 $\frac{1}{4}$ —	10 $\frac{1}{4}$	10 $\frac{1}{4}$	7 $\frac{1}{4}$ —	—	—	—	—	—
Average of sorts	—	—	—	10	—	11 $\frac{3}{4}$ 11 $\frac{1}{2}$	9 $\frac{1}{2}$ —	10 $\frac{7}{8}$	10 $\frac{7}{8}$	—	—	9 $\frac{5}{8}$	9	—	11 $\frac{7}{8}$
Average per year	—	14 $\frac{5}{8}$	17 $\frac{1}{4}$	10 $\frac{5}{8}$	12 $\frac{7}{8}$	13 $\frac{1}{2}$	9 $\frac{7}{8}$ 11 $\frac{1}{4}$	11 $\frac{5}{8}$	8 $\frac{1}{2}$ 10 $\frac{7}{8}$	10 $\frac{1}{6}$	8 $\frac{1}{2}$ 10 $\frac{7}{8}$	11	—	—	—
Weaving per cut	—	15 $\frac{5}{8}$	—	—	12 $\frac{1}{2}$	—	10 $\frac{7}{8}$	—	9 $\frac{1}{6}$	—	10	—	—	—	—
(continued)															
	1824.			1825.			1826.			1827.			1828.		
	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.
January -	8 $\frac{1}{2}$	—	13 10 $\frac{3}{4}$	—	—	—	7 $\frac{1}{2}$ —	9 $\frac{1}{2}$	—	—	—	9 $\frac{1}{8}$	—	—	—
February -	8 $\frac{5}{8}$	10 $\frac{1}{4}$	—	12 $\frac{1}{2}$	—	—	7 $\frac{1}{2}$ —	9	—	—	—	—	—	—	8
March -	—	11	—	16 $\frac{1}{4}$	—	—	—	—	—	—	6 $\frac{7}{8}$	7	—	—	8
April -	—	—	—	18 $\frac{1}{2}$	—	—	7 $\frac{5}{8}$	—	—	—	6 $\frac{1}{2}$	6 $\frac{1}{8}$	—	—	7 $\frac{7}{8}$
May -	9 $\frac{1}{4}$	—	—	—	—	—	6 $\frac{3}{4}$ 7	9 8 $\frac{3}{4}$	—	—	6 $\frac{1}{2}$	6 $\frac{1}{2}$	—	—	—
June -	9	10	—	—	18	19 $\frac{1}{2}$	—	—	14	—	—	—	—	7 $\frac{5}{8}$	—
July -	8 $\frac{7}{8}$	—	10 $\frac{5}{8}$	12	—	14 $\frac{1}{4}$	—	—	—	—	—	—	6 $\frac{3}{4}$	7 $\frac{5}{8}$	—
August -	8 $\frac{3}{4}$	10 $\frac{1}{2}$	13 $\frac{1}{2}$ 10 $\frac{3}{8}$	—	10 $\frac{1}{2}$	12 $\frac{1}{2}$	16 $\frac{3}{8}$ —	12 $\frac{3}{4}$	—	—	—	—	6 $\frac{5}{8}$	7 $\frac{1}{4}$	—
September -	—	—	—	8 $\frac{3}{4}$	10	11 $\frac{3}{4}$	—	7 $\frac{1}{2}$ —	—	—	—	—	6 $\frac{5}{8}$	6 $\frac{3}{4}$	7 $\frac{3}{4}$
October -	—	10 $\frac{1}{2}$	14	9 $\frac{1}{4}$	10 $\frac{1}{2}$	11 $\frac{3}{8}$	—	—	—	—	—	—	6 $\frac{1}{2}$	—	—
November -	—	—	—	9 $\frac{1}{4}$	10 $\frac{1}{2}$	12 $\frac{1}{2}$ 13	—	7	—	5 $\frac{3}{4}$ —	7 $\frac{3}{4}$	—	—	—	—
December -	—	—	—	—	—	—	7 $\frac{1}{4}$ 7 $\frac{1}{2}$	8 $\frac{1}{2}$	—	—	—	—	6 $\frac{7}{8}$	—	7 $\frac{3}{8}$
Average of sorts	8 $\frac{7}{8}$	10 $\frac{1}{2}$	12	12 $\frac{1}{4}$	12	12 $\frac{1}{2}$	7 $\frac{1}{8}$ 7 $\frac{1}{4}$	10 $\frac{1}{6}$	6 $\frac{1}{4}$ 6 $\frac{3}{4}$	8	6 $\frac{1}{6}$ 7 $\frac{5}{6}$	7 $\frac{1}{6}$	7 $\frac{1}{6}$	7 $\frac{1}{6}$	7 $\frac{1}{6}$
Average per year	—	10 $\frac{1}{2}$	—	—	12 $\frac{5}{8}$	—	8 $\frac{3}{6}$	—	7	—	7 $\frac{1}{4}$	—	—	—	—
Weaving per cut	—	1/10	—	—	1/10	—	1/6	—	1/6	—	1/6	—	—	—	—
(continued)															
	1829.			1830.			1831.			1832.			1833.		
	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.	Boweds.	Orleans.	Pernams.
January -	—	—	—	7	—	—	—	—	—	6 $\frac{3}{4}$ —	8 $\frac{1}{4}$ 7 $\frac{3}{4}$	7 $\frac{1}{2}$ 8 $\frac{1}{4}$	9	—	—
February -	—	—	—	—	—	—	6 $\frac{1}{4}$ 6 $\frac{3}{4}$	7	—	7 $\frac{1}{8}$ —	—	7 $\frac{1}{2}$ 8 $\frac{1}{4}$	9	—	—
March -	—	—	—	—	—	—	6 $\frac{3}{8}$ 6 $\frac{1}{2}$	7	—	7 $\frac{1}{8}$ —	—	7 $\frac{1}{2}$ 8 $\frac{1}{2}$	9 $\frac{1}{4}$	—	—
April -	—	—	—	7 $\frac{1}{8}$ 7 $\frac{1}{2}$	—	—	—	—	—	—	—	7 $\frac{1}{2}$ 8 $\frac{1}{4}$	9 $\frac{1}{4}$	—	—
May -	5 $\frac{5}{8}$	—	—	7 $\frac{1}{4}$ —	8	—	6 $\frac{1}{4}$ —	7	—	6 $\frac{7}{8}$ —	8 $\frac{1}{4}$	7 $\frac{1}{2}$ 8 $\frac{1}{2}$	9 $\frac{1}{4}$	—	—
June -	—	6	—	6 $\frac{3}{4}$ 7 $\frac{1}{8}$	7 $\frac{3}{4}$	—	—	6 $\frac{7}{8}$ —	—	—	—	—	—	—	—
July -	6	6	6 $\frac{3}{8}$	7 $\frac{1}{4}$ 7 $\frac{1}{4}$	—	—	—	6 $\frac{1}{2}$ 7	—	7	—	7 $\frac{3}{4}$	—	—	—
August -	5 $\frac{7}{8}$	6	6 $\frac{1}{8}$	—	—	—	6	—	6 $\frac{1}{2}$	6 $\frac{7}{8}$ 6 $\frac{7}{8}$	—	—	—	—	—
September -	6 $\frac{1}{8}$	6 $\frac{1}{4}$	6 $\frac{1}{2}$	7 $\frac{1}{8}$ 7 $\frac{1}{2}$	8 $\frac{1}{2}$	—	—	—	—	7 $\frac{1}{4}$ 7 $\frac{1}{4}$	—	—	—	—	—
October -	—	—	—	7 $\frac{1}{2}$ —	—	—	6 $\frac{1}{4}$ 6 $\frac{1}{2}$	7 $\frac{3}{8}$	—	—	8 $\frac{1}{4}$	—	—	—	—
November -	—	—	—	7	7 $\frac{1}{2}$	7 $\frac{5}{8}$	—	—	—	—	7 $\frac{3}{4}$	—	—	—	—
December -	6 $\frac{1}{4}$	6 $\frac{1}{2}$	6 $\frac{3}{8}$	7	7 $\frac{5}{8}$	7 $\frac{3}{4}$	6	—	7 $\frac{1}{4}$	7 $\frac{1}{4}$ 7 $\frac{1}{4}$	8 $\frac{1}{4}$	—	—	—	—
Average of sorts	6	6 $\frac{1}{8}$	6 $\frac{3}{8}$	7 $\frac{1}{8}$ 7 $\frac{3}{8}$	7 $\frac{7}{8}$	—	6 $\frac{1}{6}$ 6 $\frac{5}{8}$	7	7	7 $\frac{1}{8}$ 8	—	—	—	—	—
Average per year	—	6 $\frac{1}{4}$	—	—	7 $\frac{1}{2}$	—	6 $\frac{5}{8}$	—	7 $\frac{3}{8}$	—	—	—	—	—	—
Weaving per cut	—	1/4	—	—	1/4	—	1/4	—	1/4	—	1/4	—	—	—	—

JOHN HOWARD, Hyde.

TABLE VIII.

Lancashire District.

Appendix.

LIST of PERSONS employed in Thirty-six of the Cotton-mills in the Borough of Stockport, their Earnings and Average Ages.

Employers.	Persons above 9 and under 12.	Persons above 12 and under 18.	Persons of 18 and upwards.	Average Earnings weekly.			Total Number of Persons.
				Persons above 9 and under 12.	Persons above 12 and under 18.	Persons of 18 and upwards.	
				s. d.	s. d.	s. d.	
Axon, Charles - -	29	102	295	4 3	5 10	15 1	426
Axon, E. and W. - -	21	21	103	3 2	5 8	13 9	145
Barlow, H. - -	9	26	89	3 6	6 3½	15 7¾	124
Buckley & Co. - -	2	12	20	5 7½	7 5	9 3	34
Brown, J. and G. - -	33	72	245	4 1	7 3½	16 8	350
Barrett, Sam. - -	19	36	109	4 0	9 0	16 0	164
Clayton, F. S. - -	18	26	112	3 4	6 4	14 8	156
Ferneley, Thos. - -	40	108	256	3 10¼	6 5¼	16 6½	404
Ferneley and Wilson - {	M. 10	M. 29	M. 28	M. 3 2	M. 6 11¼	M. 20 2	115
	-	-	F. 48	-	-	F. 10 0¼	
Gee, J. and R. - -	58	106	265	3 5	7 2	15 6	429
Garside, John - -	22	91	144	3 5	8 3½	16 4½	257
Higson and Son - -	24	89	158	3 6	7 3	16 0	271
Howard, Jesse - -	53	126	307	3 11½	7 3	14 0	486
Hardy and Andrew - -	66	84	187	3 1	5 11½	12 1½	337
Heaward, Josh. - -	25	40	83	4 6	9 0	15 0	148
Hunt, Thos. - -	19	22	85	3 3	5 6	13 10¾	126
Howard, Apelles - -	79	84	310	3 8	7 2	13 8½	473
Howard, W. and C. - -	62	150	365	3 3¼	6 8	15 6½	577
Knowles, G. T. - -	60	117	223	3 0	8 0½	14 3	400
Lane and Son - -	114	258	522	3 6¼	7 0½	15 5½	894
Loyd, Sampson - -	50	107	199	3 3	6 7	15 10½	356
Loyd & Co. - -	27	15	72	3 8¼	6 2½	13 4¾	114
Loyd & Co. - -	24	48	94	4 0¾	9 1	13 10½	166
Leigh, John - {	M. 16	M. 36	M. 52	M. 4 2	M. 9 4	M. 26 3	104
	-	-	-	F. 4 7	F. 8 3	F. 11 0	
Middleton, John - -	44	42	125	3 1¾	6 4½	13 8¼	211
Marsland, Thos. - -	78	252	634	3 10¾	7 5	16 9¾	964
Marshall, Jas. - {	M. 89	M. 139	M. 372	M. 4 1	M. 7 4½	M. 20 11	600
	-	-	-	F. 3 5	F. 8 5	F. 10 9½	
Orrell, Ralph - -	32	70	294	2 9¾	6 2¾	14 4	396
Parrott, Geo. - -	10	12	30	2 10½	6 2	17 11¼	52
Pendlebury, R. - -	1	21	60	4 6	5 10½	11 11½	82
Robinson, Thos. - -	32	86	238	3 9½	5 7¾	17 4¼	356
Read, J. and T. - -	16	36	104	4 0	7 3	16 8½	156
Rooth & Co. - -	54	90	156	3 2½	7 7	14 4½	300
Steel and Son - -	34	91	150	4 0¾	6 8	16 8¾	275
Smith, Wm. - -	132	226	451	3 9	7 6½	14 6	809
Wilkinson, Jas. - -	18	53	116	4 2	8 7	15 2	187
	1,420	2,923	7,101				11,444

11,444 operatives receive weekly 6,689*l.* 8*s.* 10*d.*, or 1*l.* 8¼*d.* for each individual, the females being in proportion to males as 100 to 95.

About five small factories in the town are omitted.

Lancashire District.

Appendix.

EXPLANATION OF THE PRINCIPAL TECHNICAL TERMS IN USE IN THE COTTON MANUFACTURE.

Cotton-yarn, Cotton-twist. General terms for all spun cotton.

Cotton-thread. Yarn doubled, bleached, or otherwise prepared for the needle.

Cotton cloth or goods. Any fabric woven of cotton-yarn. The term "goods" is never applied to cotton in the state of yarn or twist.

Plain cloths. Generally applied to all fabrics where the threads of *warp* and *weft* cross each other in simple regular alternation, such as calico, cambric, &c. &c.

Fustians. Stout cloths of more complicated make, such as velveteens, &c., of infinite variety.

Fancy goods. What the name indicates. They are generally of a light flimsy kind, though not necessarily so.

Warp. The twist arranged ready for the loom; its threads run the whole length of the cloth.

Weft. The yarn which is shot across the other by means of a shuttle.

Twist has many meanings, perhaps its original is *hard twisted yarn*. The warp is always made of twist, for the whole friction and strain of the loom in weaving being on the warp, the yarn composing it is twisted harder, to make it strong and more capable of enduring its work.

Twist in its individual character is synonymous with warp yarn.

Twist is generally spun upon *throstles* for 30s hanks and under, partly from being made cheaper, and partly from bearing the working of the loom better than mule twist. Higher numbers than 30s are almost invariably spun upon mules; higher than 40s always.

Twist is turned in spinning from right to left.

Weft, for all twilled goods, from left to right, and is always spun on mules or jennies.

Cop. The yarn wound upon a mule or jenny-spindle.

Pin-cop, made small, adapted to the size of the shuttle for weaving.

PROCESS OF SPINNING.

Scutching or cleaning — carding — drawing — roving and spinning.

Spinning bobbins. The small bobbins on which the twist is wound in water or throstle frames, whence (as with twist cops) it passes to the reel and bundle, or is wound on a larger bobbin, for making warps.

Willow or Devil. Machine for beating open the cotton when taken from the bale, and for shaking some of the dust and dirt from it. This and the "hand-batting" are almost superseded by the

Scutcher. A machine with two or three blades of iron fixed to a shaft, revolving one or two thousand times a minute, which strike off the cotton in small portions as it is given out by the rollers, separating the cotton from the seeds and dirt, and bringing it into a proper state for the

Cards, or carding or combing engine. Fine teeth or iron wire fixed in leather fillets or sheets cover this machine. The cards are made partly by hand and partly by a machine invented in America.

Drawing.

Drawing. The principle of this machine, which forms also a part of the roving and spinning frames, formed the essence of Arkwright's invention and patent. It consists simply of a series of pairs of rollers running progressively at quicker speeds. The layer of cotton, in passing between them, acquires successively the velocity of the surface of each pair, and is thereby lengthened out and reduced in bulk. Before it is fine enough for the spinning-machine it must be slightly twisted to make it hang together.

Roving-frame, Bobbin and Fly or Jack Frame, Roving-billy or Stretcher. The roving is formed either on a frame, (something resembling a throstle, called bobbin and fly frame or jack-frame,) upon a bobbin, or on a coarse machine precisely the same as a mule, called a roving-billy or stretcher, in the shape of a cop.

Slubbing-machine. A slubbing is only a coarse roving, and is made as a roving on a bobbin and fly, *i. e.* jack-frame or stretcher, *i. e.* slubbing-billy; generally, however, upon a bobbin and fly-frame.

Jenny. The original spinning-frame, and still in use, though nearly confined to Stockport and Wigan. It is a mule without drawing rollers; the drawing and roving are unknown to the jenny; a thin roll comes from the carding-engine, and this is pulled or stretched out by drawing out the carriage, whilst the threads are twisted by the revolving spindles.

Water spinning-frame, now throstles. Invention of Arkwright, still in use in Mr. Arkwright's mill at Cromford, and a few others, but now generally superseded by the throstle, in which *all* the spindles are turned by one long and light roller, instead of by a series of drums, turning each six or eight spindles. Thus a saving of power is effected by the use of a less costly machine. The throstle consumes less power, and costs less than the water-frame. *Water-twist* merely means yarn spun on these frames. It was spun by water-power before the application of the steam-engine to machinery, and when the jenny was worked by hand. Most water-twist is still spun in water-mills, on account of the great power required to turn the frames, and the labour is cheaper in the country.

Mule. The invention of Crompton, and is simply an application of Arkwright's rollers to the jenny, and was called mule from being the offspring of different parents. The spinner pushes back the carriage winding upon the spindles the yarn spun whilst it was being drawn out; whereas the

Self-acting Mule is worked by power wholly. It requires rather older and better piecers, but acts without the spinner. More overlookers and mechanics, perhaps, are required for it than for the old mule; it is now beginning to extend very rapidly.

Danforth's Throstle. An American invention, threatens to run a hard race, if not supersede, the present throstle, unless the latter be susceptible of considerable improvement.

Power-looms have superseded the common looms for most plain cloth and fustians; a certain number of hand-looms will always be required for making fancy goods and silks.

Reed. The comb (the teeth of which are fixed in two frames) through which the threads of the warp pass, and which strikes each shoot of weft into its place in the cloth.

Healds. Threads which raise one portion and depress another portion of the warp, that the shuttle may pass across between them. "*Knitting Healds*" is one of the occupations of children in a power-loom mill.

Dressing. Putting paste on the warp, to prepare it for the loom. It requires considerable heat. Only men are employed, and fifteen or twenty will dress for five or six hundred looms.

No. means the number of hanks in a pound weight of cotton. Each hank contains 840 yards.

Coarse spinning means 40s and downwards; perhaps seven-eighths or nine-tenths of the whole may be coarse yarn.

Fine spinning. No. 80 and upwards: from 40s to 80s do not rank strictly with either fine or coarse.

Lancashire District. The number of power-looms in England and Scotland may be from eighty to ninety thousand.

Appendix.

Power-looms will turn out, perhaps, twenty-one pounds weekly of printing-cloth and shirtings, eighteen to twenty-two pounds of fustians, forty or fifty pounds of coarse calicoes, possibly forming an average of thirty pounds weekly.

<i>A Mule-spindle</i>	perhaps spins	-	-	16 to 18 hanks	coarse twist	weekly.
				20 to 24 ditto	weft	ditto
<i>A Throstle Spindle</i>	-	-	-	25 to 30 ditto	twist	ditto
<i>Danforth's, or American Throstle</i>	-	-	-	40 to 50 ditto	ditto	ditto

A loom will consume three pounds of finest flour in dressing the warp weekly.

Looms.	Weeks.	lbs.	lbs. to a load.	Loads.	
80,000	× 52	× 3	÷ 280	= 44,572	42s = £93,601 per annum.

Supposing the corn laws to raise the price of flour only 10s. per load, $44,572 \times 10 =$ £22,286 per annum tax upon power-loom manufacturers, or a tax of 5s. 6½d. per loom per annum, beside what is consumed by hand-looms.

From SAMUEL GREG & Co.

MR. TUFNELL'S REPORT from LANCASHIRE.

THE most prominent charge that has been brought against the factories is, that either the masters, or persons by their sanction and authority, are in the habit of inflicting corporal punishment, sometimes of the most cruel description, on children employed in their mills.

To this accusation I can give the most decided and unqualified denial. It is not only not true, but cannot generally be true, as must be obvious to every one acquainted with the mode in which a cotton factory* is managed. The charge almost wholly relates to the piecers (children employed in joining the threads that break in the spinning), and the scavengers (children employed to sweep up the waste cotton), as it is only in these departments that children in any numbers are employed; and in no other are they engaged at so tender an age.

Now, with some rare exceptions, all the piecers and scavengers are employed and paid by the working spinners themselves; the master or his immediate agents have little or rather no control whatever over them: if they do their work badly, the spinner, who is always paid piece-work, suffers, and if there is any ill-usage at all, he, and he only, is to blame. In support of this, I beg to make the following extracts from the evidence:—

“Who is it that beats the children?—The spinner.

“Not the master?—No; the masters has nothing to do with the children, they don't employ them.” (*Evidence of John Pilkington, page 5, First Report.*)

“Were the children ever beaten?—Frequently, by the spinners.

“Did the overlooker or manager beat them?—Not often, I think; but in many cases they were used worse than beating.

“What do you mean by that?—For instance, in the winter-time, let the weather be how it would, these children would be frequently sent into the street with only a ragged shirt and small-clothes. I have stopped them many a time and sent them back, and upbraided the spinner for his cruelty.

“Then it was the spinner, and not the master, who sent them out?—Only the spinner.” (*Evidence of Thomas Hodges, page 2, First Report.*)

“Do you pay and employ your own piecers?—Yes; it is the general rule in Manchester; but our master is very strict over us, that we don't employ them under age.

“Are the children ever beaten?—Sometimes they get beat, but not severe; for sometimes they make the stuff to waste, and then correction is needful; but they are not beat to any severity that ever I see; but that is unknown to the master; he does not allow beating at all.

“Then, when the children are beat, it is by the spinners who employ them?—Yes; spinners and overlookers.

“Does the master order the overlookers not to beat the children?—I believe the master does not allow the overlooker to beat them; but he may do it sometimes without the master's knowledge.” (*Evidence of John Dixon, page 58, Second Report.*)

* This Report must be taken as referring principally to the cotton factories. The other trades included in the Ten Hour Bill (silk excepted) were comparatively so rare in my district, and the time allowed for the investigation was so short, that I was able to pay but little attention to them. The cotton trade, however, so infinitely surpasses the others in extent, besides being the only one yet subjected to legislative restrictions, that the information to be obtained from this branch of the inquiry is far more valuable and instructive than is to be got from the other trades. As it was written while Lord Ashley's Bill was still under discussion, a great part of the Report is taken up with observations on that measure; but I have thought it best to leave them without alteration, as that Bill may be again brought forward. The “present Factory Bill,” which is frequently mentioned, refers to the Factory Bill passed in 1831. The references to the First and Second Report allude to the evidence taken by myself, and marked D. 2. in the first and second volumes of the labours of the Factory Commission.

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I might cite numerous other passages from my examinations in proof of the points adverted to in the above extracts, which have been selected as they all come from witnesses strongly biassed in favour of Lord Ashley's Bill. The masters, though they have no direct control over the children, (who are almost always the spinner's own children, when he has any,) in most cases do all in their power to prevent the ill-treatment of them, by giving express orders that no child in their establishments be beaten by any one, whether such child be in their immediate employ or not; and this order is enforced by pecuniary fines, or by the threat of turning away any spinner who disobeys it,—a threat which is frequently put into execution.

It should also be observed, that the desire for the Ten Hour Bill exists almost wholly among the working spinners, who are the chief supporters of the cry about the inhumanity of employing young children in factories, and the narrators of the cruelties practised on them, which cruelties it appears, if practised at all, are only practised by themselves.

The following extracts will show the correctness of these assertions:—

“The mule-spinners earning high wages appear to be almost the only class of work-people in this quarter who are in favour of a Ten Hour Bill.” (*Evidence of P. Ewart, page 37, Second Report.*)

“Which class of operatives chiefly advocate the Ten Hour Bill?—Spinners; I don't think any other takes much part in it.

“Do you think those hands who are in favour of the Ten Hour Bill are aware that it will prevent them working up a single minute of lost time?—Besides the spinners, not one out of ten understands the thing at all, or in fact meddles with it; I am satisfied of that.” (*Evidence of T. Warburton, page 40, Second Report.*)

“I do not only speak for Stockport; I speak for Manchester, Bolton, Oldham, Ashton, and Stayleybridge. I was deputed by the operative spinners to these places. I speak only of the spinners.” (*Evidence of A. Docker, page 13, First Report.* This witness was specially sent to me to support the Short-time Bill, and one of the delegates of the workmen chosen for that purpose.)

“Do you know whether many of the Bolton operatives are in favour of the Ten Hour Bill?—I believe many of the spinners are.” (*Evidence of Thomas Glover, page 110, First Report.*)

“Amongst which class of workmen does the desire for the Ten Hour Bill principally exist?—In the cotton branch in the spinning and weaving.

“Are the spinners nearly universally for the Ten Hour Bill?—Yes.

“And the weavers as universally?—I cannot answer for the weavers, as I am not engaged in their line of business. Ours is a weaving-mill, but I don't associate with them.” (*Evidence of J. Dixon, page 58, Second Report.* This man was a member of the Short-time Committee last year.)

And yet I had not been a week in Manchester before a procession of 4,000 children was got up to be viewed by the Commissioners, and there were the oppressors themselves heading the throng, while straps and bludgeons,—emblems of their own shame,—instruments of their own cruelty, if cruelty there be—were paraded before our eyes.

The case then stands thus:—A charge is brought against a body of men, which is not only untrue, but the very reverse of truth, and which can only by a remote possibility be true,—a charge too, which, if it rests anywhere, can only rest with the accusers themselves. Can calumny and falsehood go further?

I must, however, defend the workmen against themselves, for truth compels me to record my conviction that the general accusation of cruelty is groundless as respects any body of persons. They dare not be cruel, from fear of the just resentment of those masters whom they charge with cruelty. That individual instances of ill-usage do occur is doubtless true; and they will occur so long as man is actuated by human passions; but that they are exceedingly rare,—more rare indeed than in any other occupation in which children are employed,—all the evidence I have collected goes to prove. It would be the grossest injustice to assert that they equal in amount one quarter of the cruelties which children have to endure in the glass-house, pin-heading, and colliery trades.

The

The fact that struck me most, in the course of my investigation, was the different grounds on which the proposed Factory Bill of Lord Ashley is advocated in Parliament, and I believe everywhere out of the manufacturing districts, and in them. The cruelty of employing young children during the long hours of factory labour, and the ill-usage to which they are subjected in keeping them to their work, is the parliamentary and public ground for supporting the bill,—the ground on which the philanthropists take their stand. Now, not a single witness that came before me to give evidence in favour of the Ten Hour Bill,—and I made it a rule never to turn away any of this class (besides summoning many who otherwise would not have come forward at all),—not a single witness who advocated the Bill, of whatever trade or station he may have been, supported it on the above grounds. This reason was of course mentioned to me by some of them as influencing their determinations; but by cross-questioning them, and by means of circumstances which came to my knowledge, I am perfectly satisfied that motives of humanity have not the smallest weight in inducing them to uphold the Ten Hour Bill. I made this fact out with a degree of certainty which I am confident leaves no room whatever for doubt upon the subject.

The following are a few of the quotations from the evidence that establish this point:—

“Do you know the reason why some operatives advocate the Ten Hour Bill?—I believe it is principally owing to the want of due consideration in them. I think they indulge an idea that the articles manufactured will get up to a better price in the market, so that in a short time they will be able to demand their present wages; but we think that is not likely to be the case at all.*

“Did you ever hear any other reason for their advocating it?—I don't know that they have any other reasons, but I believe not. There was a man from Manchester, who came into our meeting, an advocate for the Ten Hour Bill, and he told us that we should receive no less wages in twelve months' time than we do now, provided it was dropped to ten.

“Did he give any other reasons for wishing you to agree to his opinions?—No, he did not,

“Did he say nothing about the cruelty of employing young children in mills twelve hours daily?—No, he did not say any thing about it. I have often heard statements of this sort, of persons being deformed by working so long, but I never saw any thing of the sort.” (*Evidence of the deputation from the Rochdale workmen, page 71, First Report.*)

“What is the motive with the operatives in general for advocating the Ten Hour Bill?—They imagine their wages will not be pulled down; that there will be so much less yarn in the market; that the price will rise; and that will cause their wages to rise. That, I am certain, is their general opinion.

“Do you think if they were assured that such a rise of wages could not take place, they would still advocate it?—No, they would never advocate it.

“Has a desire to lessen the labour of young children no influence in making them advocate it?—Not in the least.

“Why?—Because it is generally discussed among them, and such a reason is never mentioned. Myself, being an old operative, they will discuss the measure with me with more freedom than with other masters, and I have talked with them frequently on the point. I have conversed with many with whom I have formerly worked as a journeyman, and I am certain they give us their real opinions freely.” (*Evidence of Isaac Collinge, page 94, First Report.*)

“Can you explain why they (the operatives) make this outcry about the cruelty of employing too young children in mills, when in every case of such employment it appears that they themselves are to blame?—As far as I am able to judge, they think that if the hours of labour were reduced, their income would be the same as at present; that is the notion among our men; many of the spinners, with whom I have spoke on it, have told me that.

“Then you think that a desire to decrease the labour of children is not the real reason for advocating the Ten Hour Bill?—No; I never met one that had that feeling about the children; they all say it would be pleasant to work ten hours and have the same wages.

“Do you think that if they thought their wages would be reduced one sixth, they would advocate the Ten Hour Bill?—No, not if they were reduced 1s.” (*Evidence of J. Greenough, page 134, First Report.*)

“What is the reason with some operatives for advocating the Ten Hour Bill?—I believe a deal of folk think that if they come to a Ten Hour Bill the market will be so much brisker, and then that they might get as much wages for ten hours as twelve.

“Do you think that is their only reason?—I do; that is the reason, and it will not be the case.

“Are they not influenced by a desire to reduce the labour of little children?—No, they don't say so, for they can see as well as us it is not so.

* The Ten Hour Bill of Lord Ashley would in effect have reduced the time of working for all, adults as well as children, to ten hours daily.

Lancashire District. "Have you never heard them give that as a reason?—No." (*Evidence of J. Isherwood and T. Bartly, page 60, Second Report.*)

Now the inevitable conclusion from this evidence is, that the reason, which has been so prominently put before the public in favour of the Ten Hour Bill, is wholly groundless;—that children in cotton mills are not injured by their labours,—are not overworked. What other explanation can be given of the circumstance, that of the numerous witnesses examined not one rested the case for the Bill on the ground of its being necessary for the protection of children? This notion is wholly repudiated in the greatest manufacturing district in England! How else can we explain the fact that persons of the greatest respectability are in the habit of sending their children to work the usual hours in cotton mills? To take a single instance: Mr. Rowbotham, the superintendent of nearly 400 workmen in Mr. Birley's mills, (*page 126, First Report,*) a man of equal respectability with any London shopkeeper, has brought up all his children in cotton factories, and three out of four of them in that department which is usually considered the most unhealthy of all,—the card-room. Are we to suppose that Mr. Rowbotham, and the hundreds such as Mr. Rowbotham, are so devoid of parental affection as to wish to deform their children, and to subject them to all the miseries described in the Report of the Factory Committee; or so unobservant, as not to have discovered, if such a discovery be possible, that twelve hours' labour in a cotton mill injures their children? One of two things must be true; either the tales of the hardships of the factory children are unfounded, or the Lancashire people are very fools in intellect, and demons in feeling. If those persons, who are most acquainted with and constantly reside in the cotton districts, do not rest their advocacy for the Bill on the plea of humanity, and if by their conduct they show that they disbelieve this plea, what evidence can surpass or even equal in force this argument? It overlays and supersedes all other evidence whatever, medical or other, that can be adduced. If it is contradicted by all the physicians in England, the physicians must be wrong;—if returns of sick societies or mortality tables say otherwise, they must be false;—all the testimony that can be produced from other sources cannot weaken this evidence, unless, indeed, it can be proved that the whole population of the cotton districts possess the heads of idiots or the hearts of brutes.

It may, however, be satisfactory to see whether the evidence to be deduced from medical statistics and medical gentlemen is really so uniformly against the healthiness of factory work; and as I collected some information on this point, it may be proper to state it. In Bolton there is a very large sick society attached to the parish church Sunday-school, and which contains 580 members. I desired the secretary of this society to draw up an account of the ages, weeks' illness, and occupation of every person in this society for the years 1831 and 1832, and the return to this application will be found in p. 137 of the First Report. As this society contains very nearly an equal number of factory and non-factory members, there being 274 of the former and 289 of the latter, it obviously affords very convenient elements for making a comparative inquiry into the health of the factory workmen. Now, I find by a calculation made from this table, that each factory member has five and a half days' illness in a year,—a result which is much larger than it otherwise would be, owing to the extraordinary sickness of one orphan member, Mary Easton (p. 138). If we exclude this case,—which we may fairly do, since, scrofula, the disease* she laboured under, is nowise peculiar to, nor can be attributed to mill labour,—the yearly sickness will average four days. On making a similar calculation with respect to the non-factory members, it appears that they average ten days sickness a year; that is, factory work is twice as healthy as other work. In p. 57 will be found a report of a Manchester sick society, which contains so very minute a proportion of non-factory members, that if we suppose there are none at all, the result obtained for the

* "Scrofula is not more frequent in spinners than others." (*Evidence of Richard Johnson, surgeon at Bolton.*) Dr. Carbutt, physician to the Manchester Royal Infirmary, says "scrofula is almost unknown in cotton factories, although the air of this town and neighbourhood is particularly cold and humid. In a very extensive examination which I and some other medical men made a few years ago, we found, to our surprise, that the cotton factories, instead of producing scrofula, are, in some sort, a kind of means of cure. The late Mr. Gavin Hamilton, who was for thirty-six years surgeon to our infirmary, and who previously to that had been surgeon in the Queen's Bays, said, in my hearing, after examining the cotton factory, 'Gad, we found the factories to be a specific for the scrofula.'"

health of factory workmen by adding up the whole columns will be substantially correct. Now this table gives four and a half days' illness per annum for each factory operative *, a result which so closely tallies with that obtained from the Bolton table, that the coincidence establishes the correctness of both. Both the reports are verified on oath; and the accuracy of the last I tested by comparing it with the books from which it had been made up. Mr. Finlaison, in his Report on Life Annuities, states that the average duration of sickness of the London labourers between the ages of twenty and thirty-five is seven days; thus it appears that the members of these factory sick societies suffer little more than half as much illness as London labourers of the above ages. †

In the country mills the health of the operatives is superior to what it is in towns, as must be obvious even to a spectator of their respective appearances, if we had no table from which to form an accurate judgment. In p. 121 will be found a return of the deaths in the sick societies at Mr. Ashton's mills at Hyde, from which it appears, that in the card-room, the most unhealthy department of a cotton-mill, only nine deaths have occurred in nearly three years, among 273 members; and in the dressing-room, where the heat, when I entered it, was ninety-two, only two deaths have happened amongst twenty-eight members in thirteen years. But the health of the piecers, who are almost all children, is the most favourable of all, and indeed extraordinary, since out of an average number of 100 members there have been only four deaths since 1819.

The freedom of the cotton factories from cholera is a fact so well established, that it is hardly necessary for me to allude to it. Liverpool suffered last year twice as severely from it as Manchester. Fever also prevails less among the factory workmen than in any other class of the community.

The following extracts from the evidence will throw some light on the medical condition of the cotton workers:—

“The children in Bolton are as moral and in as good physical condition as anywhere else, where men, women, and children work under the same roof, in any other employment, and are better grown than domestic drudges, miners' children, weavers, winders, dress-makers, rag-dressers, tailors, and girls that are educated at second-rate boarding schools.” (*Evidence of Richard Johnson, surgeon, Bolton.*)

“The class of persons applying for relief at Liverpool quite as sickly in their general appearance as those applying at the Bolton dispensary. Has had considerable practice among the working classes in Bolton and the neighbourhood. Does not consider the persons employed in cotton-mills generally an unhealthy class. Attends many cotton-spinners' families, but has seldom seen any of them sick, except the wife and young children who do not work in mills. The health of factory people is much better than their pallid appearance would indicate to any person not intimately acquainted with them. Their health fully equal to tailors, shoemakers, letter-press printers, plumbers, watchmakers, file-cutters, dressmakers, straw-bonnet makers, and some domestic servants.” (*Evidence of G. Wolstenholme, surgeon, Bolton, page 18, First Report.* This gentleman was four years house-pupil in the Liverpool infirmary, five years house-surgeon and apothecary to Bolton dispensary, and subsequently six years honorary surgeon to the same institution, and has been nine years in private practice.)

Mr. Hutton, who has been in practice as a surgeon at Stayley Bridge upwards of thirty-one years, and of course remembers the commencement, and has had an opportunity of tracing the progress and effect, of the factory system, says that the health of the population has much improved since its introduction, and that they are much superior in point of comfort to what they were formerly. He also says that fever has become less common since the erection of factories, and that the persons employed in them were less attacked by the influenza last year than other classes of workpeople. (*Page 143, First Report.*) Mr. Bott, a surgeon,

* I trust Dr. Hawkins will excuse me for correcting a mistake into which he has fallen in estimating the annual average sickness in this society. He has not perceived that the table is a return of *two* years sickness and not *one*, and he has consequently in his first report made the illness of the members double what it really is.

† It appears from Dr. Mitchell's report, in another part of this volume, page 30, that the yearly sickness of the factory children, which I have deduced from the tables above mentioned, hardly exceeds the lowest rate of sickness in the labourers employed by the East India Company, and these labourers form, says Dr. Mitchell, “a body of men far more select than the men in the factories, and fully as select as any benefit society whatsoever, and far more so than societies generally.”

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who is employed by the operatives in Messrs. Lichfields' mills to attend them in all cases of sickness or accident, at the rate of one halfpenny per week, (a sum which indicates pretty strongly their small chances of ailment,) says that the factory workmen are not so liable to epidemics as other persons, and that though he has had many cases of typhus fever in the surrounding district, nearly all the mill-hands have escaped, and not one was attacked by the cholera during its prevalence in the neighbourhood. (*Page 56, Second Report.*)

In page 100 of the First Report will be found an account of the oldest sick club perhaps in the country, it having existed for twenty-five years. As it has always contained more than 600 members, an account of their illness, taken from the books, during the whole period of the club's existence, would be a most valuable document, and, in fact, decisive of the question regarding the healthiness of factory employment. Mr. Holland Hoole, one of the proprietors of the establishment where the club exists, says, respecting the deaths in it, "I made an investigation last year as to the number of coffins required from 1827 to 1831 inclusive, a period of five years; twenty-nine coffins had been paid for, and the books show that forty-three persons in five years had run out their twelve weeks' pay, and consequently been excluded from further aid till their recovery. Of these, twenty-three were still living, and had resumed their work; eighteen had died, it was supposed; some a long time after leaving. If the whole of those eighteen are added to the twenty nine, it will make forty-seven deaths in five years, or 9.4 per annum, which would be less than one and a half per cent. for ages fourteen to fifty."

Mr. Greg gives the following account of the health of persons in his employment (p. 31):—

"What is your opinion as to the effect which factory labour has on children?—By the documents that we sent in with the queries, it appears that on the experience of the last twenty-two years, of ninety apprentices, from ten to twenty years of age, that only seventeen deaths, or one in one hundred and twenty, occurred in that time; and of these three were from causes totally unconnected with their employment. If you deduct these three, it will give of deaths one in a hundred and forty-three. It appears, also, from the medical certificate of our family surgeon, who has attended these children forty-two years, that their health is fully as good, and he thinks even better, than the average of his practice in the same rank of life. It appears, also, from another document, that at the end of forty years, during which time we have kept the same number of apprentices, who of course gained a settlement by such apprenticeship, the total number of whom must be very great, that the whole annual expence of these apprentices for parish relief (together with that of all others who may have gained settlements in other ways, arising from our factory employment) amounts on an average to 24*l.* 6*s.* 3½*d.* for the last three years; from which it may be fairly inferred that their health has not been ruined, or their bodily powers impaired by their employment. With respect to the health of other people employed in the same factory, it appears from the sick club books, that out of three hundred club people we have had on an average on the sick list six and a half persons, or rather more than two per cent., during which time of sickness they have received one half their wages; and the deaths during the same time have amounted to one in a hundred and fifty. The mortality will probably a little exceed that, for after being ill six months (latterly three months) they are taken off the books of the sick club, and therefore, if they die after, there will be no record of it. By the experience in our mill at Lancaster, it seems that, out of five hundred and sixty workpeople, our proportion of sick has amounted to no more than one and three fourths per cent.; at this mill, however, they lose their whole wages."

It is perfectly true that the Manchester people have a sickly, pallid appearance; but this is certainly not attributable to factory labour, for two reasons: first, because those who do not work in factories are equally pallid and unhealthy-looking with those that do, and the sick society returns show that the physical condition of the latter is not inferior;—secondly, because the health of those engaged in country cotton factories, which generally work longer than town ones, is not injured even in appearance. Many I have seen with ruddy countenances, which was especially the case in Mr. Ashton's mill at Hyde, where the operatives were working twelve hours and a half daily, that is, half an hour longer than any mill in Manchester. The apprentices in Mr. Greg's mill at Wilmslow were equally well looking. Mr. Wolstenholme, surgeon at Bolton, says that "the health of factory people is much better than their pallid appearance would indicate to any person not intimately acquainted with them." In Bennet Street Sunday-school I made a comparison of the factory and non-factory children, by separating each at different sides of the school-room, and on contrasting in this way more than 1,000 children, neither myself nor colleagues could detect the smallest difference in their

personal appearance. I afterwards made the same comparison, with the same result, in two other Sunday-schools. We also weighed and measured nearly 2,000 children, when it appeared, that of boys between the ages of nine to seventeen inclusive, those who work in factories are three pounds lighter than those who do not. This result is just what might be expected, inasmuch as factory labour requires no muscular exertion whatever, consequently many of the muscles are never fully developed, and the additional weight, which their development would give to the body, is lost. If their employment were more laborious than it is, they would doubtless weigh heavier. The case is different with the girls, as those who work in factories are little more than one third of a pound lighter than those engaged in other employments. This is probably owing to the circumstance, that there is no work for girls, even out of factories, that requires much bodily exertion. The female sex, if not at factory work, are mostly employed at the needle or such occupations as demand little or no application of strength, and consequently there is little difference in their weight, from whatever employment we take them.

The temperature of the apartments in which the children work has been much complained of, and this objection has been specially urged against fine spinning mills. During my stay in Manchester, to which town fine spinning is almost wholly confined, the temperature of the atmosphere was generally 75, and then no artificial heat whatever was used; and on inquiring of the children in the mills*, whether the heat was ever greater, they invariably answered it was not; and several respectable witnesses state on oath that a higher temperature is never required. It is, however, an error to suppose that high temperatures within certain limits are injurious to health, if a circulation of air be kept up. It is foul air, and not hot air, that is hurtful to life.

Messrs. Johnson and Wolstenholme give the following evidence on this point :—

“According to your experience, do any peculiar evils result to children from the high temperature at which some of the rooms in factories are maintained?—The mere high temperature is not so injurious as the want of pure air; for instance, the stovers in bleach-works hang their cloth in temperatures exceeding one hundred, and do not appear to suffer any great inconvenience from it, though they frequently leave the apartment for the open air.

“Then is it your opinion that rapid change of temperature is never injurious?—My opinion is that the temperature of sixty-five to seventy-five, beyond which it is not necessary to go in spinning, is by no means injurious, if a circulation of air is maintained. I may state it as a general fact, that high temperatures are not so injurious to health as is usually supposed, if ordinary caution be used in changing clothing.”

Mr. Bott, surgeon, also says,—

“Are high temperatures injurious to health?—I have not found it so. I have attended the workpeople connected with bleach-works, where the men work in stove-rooms, where the temperature is upwards of 100 degrees, and I have not found that their health has suffered more than that of others who have not been employed in the stove-rooms.”

The drying-room in calico-print-works is sometimes at a temperature of 112, and I have seen as healthy-looking boys working in it as could be met with in the country. Messrs. Binyon and Neild mention (*page 45, Second Report*) that they had made inquiry of some boys who had been engaged in this department for four years, and had never left their work on account of ill-health. The dressers are the healthiest persons in a mill, after the weavers, yet the common heat of the rooms where they are employed is ninety, and the first specimen of a dressing-room which I entered was ninety-two, and the smell of the sour flour used in preparing the warp was intolerable.

* It is almost needless to state that I never sent notice of an intention to visit any factory, but always walked abruptly into the rooms, frequently alone, and questioned the persons engaged in the work. There was scarcely a possibility of myself or the nature of my visit being known to many of the persons so questioned. Some of the factories I inspected without it even being known that a Factory Commissioner visited them, as in a few works any person applying to view them is instantly admitted, and I generally attempted to enter in this way, as it removed the chances of deception being practised. In general, nothing could exceed the alacrity with which every factory was shown to me, on stating my errand. In two instances only did I meet with any obstruction, and then it appeared that the masters were absent, and had omitted to give orders to allow the Commissioners to enter their mills: and it is not usual to admit strangers without letters of introduction. In both cases apologies were sent in the course of the day, and I was requested to make a second call.

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It is utterly impossible, from the nature of the machinery, that the spinning-rooms in a cotton factory can be crowded. The mules, owing to their advancing and retreating motion, must have six or seven times the space to work in that the actual bulk of the machinery requires, and nine tenths of the children are employed at the mules. It is difficult to explain this clearly without a diagram, but any one who has once visited a cotton factory must be aware of the impossibility of unduly crowding human beings in a mule-spinning room. Neither are any of the other rooms crowded, for the simple reason that it would be to no purpose to crowd them, except to put the manufacturer to needless expense. It would be an outrageous falsehood to assert that any part of a cotton mill is one tenth part as crowded, or the air one tenth part as impure, as the House of Commons with a moderate attendance of members.

The only labour in cotton factories that seemed to me to have any tendency to produce deformity is throstle-spinning, at which, however, young children are never employed, but only those who are above the ages of sixteen or seventeen. The action which injures the workman is stopping the throstle, an operation which is performed by standing on one leg and raising the other on tiptoe, so that the knee is brought in contact with the spindle, and stops it by friction. It may be difficult to conceive how this action can occasion deformity, as the position is by no means an unnatural one, and is in fact assumed unconsciously by every person almost daily; but the injury arises from the frequency with which the operation is repeated, as it has to be done everytime the thread breaks. It is, however, entirely the workman's fault if deformity is produced, as the way to avoid it is easy and within his own power. Many of them never stop the throstle with the legs at all, but use the hands for this purpose, and then there is no danger whatever. Another preventive consists in using the legs alternately for the operation, as in that case the weight not being thrown on one side more than the other, no injury arises from the work. The superintendent of the apprentices in Mr. Greg's factory, on being asked whether stopping the throstles injured the legs, answered,—

“I don't believe it does; but I have heard those that have hurt themselves say that it is their own fault. If they use first one leg and then the other to stop the throstle, there is no harm at all. They have no need to stop always with one leg. It is just as easy to stop with one leg as the other.

“Is there any other work in the mill that has any tendency to injury those employed at it? —No; I never heard of any.”

Simple as the remedy is, it is difficult to get the workpeople to use it, as there is a well-known indisposition among them all to adopt any contrivance which gives trouble, however great the future benefit, provided no present inconvenience is felt. It was found impossible to get the Sheffield dry-grinders and needle-pointers to use the magnetic mouth-piece as a preventive against the inhaling of the iron-filings, though an early death is the infallible consequence of their refusal. One thing is certain, that, be the deformities occasioned by throstle-spinning what they may, a factory bill will not remedy the evil, unless it contain a clause enforcing a severe penalty on any throstle-spinner who does not stop the spindle with his hands, or use his legs alternately for that purpose.

All the seriously-deformed persons who were sent to me were adults; nor did a single case of a child badly deformed by its work come under my notice. The reason is this; many years ago it was the practice to work much longer hours than at present, and several persons who were injured by overwork at that time may be met with. But a far more potent reason for deformity being so much less frequent now than formerly is the disuse of the old spinning frame, which was made so low for many years after its invention by Arkwright that many thousand persons were deformed by working at it, before the introduction of the throstle machinery.

The following evidence in proof of this is given by Joseph Shipley, a man who was for many years a working spinner, and the leader, twenty years ago, of the most determined strike that ever took place in the cotton trade:—

“Are these low spinning frames used now?—Many of them have destroyed them, and put in new machinery, what they call the throstle machinery; some have done away with them entirely, and put in mules.

"Then do you mean to say the present machinery is less liable to cause deformity than forty years ago?—Yes.

"Is that the general opinion?—Yes, that is the general opinion.

"Then why do we now hear of so much talk about deformities caused by working at the machinery?—They cannot prove it now. You may rip up a deal of these old hands what were deformed at these old machines, but I look upon it that the cotton trade now makes fewer cripples than any other trade now going.

"But people are all saying the children are deformed from overwork?—Well, it is as I tell you. Those as is took care of are as healthy as at any other trade. I know that the cotton trade has produced as few cripples, according to the number of hands employed, as any other trade in England."

The following is the evidence of another working spinner, Aaron Jackson, on this point:—

"Are children often injured by the work?—I never saw any children in my life injured through labour, because a child's labour is calculated to its strength: it has no more to do in proportion than another. I have children that have weak joints and ankles, but that happens to children out of factories as well as those in. I know a man that has two that have never worked in factories, that have weakness in their ankles, and swellings."

In most mills the dangerous parts of the machinery are so well fenced off that it is almost impossible for an accident to occur; and when one does happen, which is very rarely, it is generally through some gross negligence or misconduct in the person injured. Fatal accidents are not one tenth part so common in the cotton factories as in the coal-mines. Among the 1,100 persons employed in Mr. Ashton's mills only one fatal accident has occurred in fifteen years, and that was owing to a man going into a room which he had no business to enter, getting a ladder, for what purpose nobody knows, and mounting to the top of the room, where he was caught by a horizontal shaft, and instantly killed. In the coal-mines belonging to the same gentleman, three fatal accidents have occurred in the same time among seventy workmen; that is, fatal accidents are forty-seven times less numerous in the cotton-mill than in the coal-mine. But this mine is a peculiarly favourable specimen. In page 47, *et. seq.* will be found a fairer statement of the accidents to which miners are subject. Were I to say that they are a hundred times more frequent in coal mines than in cotton factories, I should be probably below the mark.* Some Wigan witnesses declare (*page 60, Second Report*), that they only remember one serious accident in Wigan for the last four years, and that was the case of a boy losing his arm. Mr. Bott, the surgeon attending Presto Leigh Mills (*page 56, Second Report*), says, that during the three years of his employment there, only one fatal accident has occurred, and that was through the carelessness of the sufferer.

Mr. Greg gives the following evidence on this topic:—

"Have you any account of accidents arising from machinery?—In our Quarry Bank Mill we have an account of only one serious accident among 380 operatives — of a girl who lost her leg by playing with a shaft. This is above twenty years since, and she worked at the mill many years after. At Caton, among 120 operatives we have had no serious accident for the last ten years, beyond which we have not extended our inquiries; and during the same time five trivial accidents of hands scratched or bruised, but now all well enough for their work. At Lancaster mill, among 560 hands, since the mill was finished, which was only three years ago, one boy had an arm broken while playing in the mill before it started, one lost a thumb, and three had their fingers bruised, but all are at their work again, and not the worse. In the infirmary and dispensary accounts, all accidents set down to mill-hands do not occur in mills; as an instance — three of our workpeople in our Bury concern broke their legs within a very short time, but all the accidents occurred at a public-house."

As the immorality said to be engendered by the factory system is a subject that has been much dwelt upon, I put many questions to the witnesses referring to this topic, and the whole current of testimony goes to prove that the charges made against cotton factories on this ground are calumnies. I might quote numerous facts from the evidence in proof of this assertion, but I shall confine myself to the statements of clergymen, as from their station,

* According to a paper published in Newcastle in 1828, 1,424 fatal accidents happened in the coal-mines situated in the neighbourhood of that city between 1805 and 1828. It was generally the practice to omit holding inquests on those who met their deaths in the mines till 1815, when, owing to the strong representations of the judge on the circuit, the omission was subsequently remedied. After the explosion which took place in 1814 in Hebburn colliery, and by which eleven men were killed, no inquest was held on their remains. Forty-seven persons were killed in a colliery in May last, 1833.

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habits, and employments they have both the best opportunities of forming correct opinions on this matter, and their testimony may be considered the most unbiassed that can be obtained.

The following is the opinion of the Reverend W. Huntington, Rector of St. John's, Manchester :

"Is the factory children's character in general as good as that of children otherwise employed or idle?—I think it is quite, or better.

"To what special cause do you attribute that superiority?—I should attribute it to the regular habits of industry and Sunday-school instruction.

"Then do a greater proportion of factory than other children, in general, attend Sunday-schools?—I think the proportion is greater.

"On the whole, are they more immoral than other classes?—I think not: from my own observation I would undertake to say, that in our Sunday-school, where many are grown up, there is not a single girl of a vicious character."

The Reverend Henry Fielding examined:—

"Were you not chaplain to the Manchester prison?—I was. I was elected January 1825, and served to October 1830.

"While in that situation, did you remark that the factory population were more or less addicted to crime than other classes of the community, in proportion to their numbers?—Certainly not more addicted to crime in proportion to their numbers than other classes.

* * * * *

"Is the conclusion to be drawn from your evidence, that factory work has no tendency to injure the health or morals of the children employed?—Speaking generally, I should say not, from the experience of a residence of twelve years in this manufacturing district."

The Reverend John Piccope, Rector of St. Paul's and secretary to Sunday-schools under the establishment, examined:—

"Is the factory children's character in general as good as that of children otherwise employed or idle?—I think it is quite as good as the character of other children who are employed."

The Reverend James Brooks, Unitarian Minister at Hyde, examined:—

"How many years have you resided in Hyde?—Twenty-seven.

"Then you remember the condition of the population before the factory system began?—It was in its infancy when I first came here.

"Will you have the goodness to state the moral change which it has produced on the population?—The moral state of the people was at that time lower than it is at present. Formerly, the people, perhaps, worked four days in a week at other employments, and the rest were spent at the public-house. I am decidedly of opinion, that the people employed in factories in this district are quite as sober and moral as people employed in other trades.

"What, on the whole, is your opinion of the effect that factory employment has on morals?—In all employments where they work together in crowds, the temptations to the young, I think, are greater; but I think that evil may be sufficiently counteracted when proper means are used to promote moral habits amongst the people employed.

"What are those means?—When the owner of the mill adopts regulations to put down all improper language and rude behaviour in the mills; when he notices and encourages, by his approbation, those that are most moral amongst his workpeople, and marks by strong disapprobation the contrary character, and promotes the establishing of Sunday-schools for the instruction and moral improvement of the children belonging to his mill.

"Do you think that many mills are subject to such regulations?—Several mills in my own neighbourhood are, and I know some mills where the workpeople are remarkable for their moral habits and intelligence.

"Do you then wish to be understood as asserting, that mills may be regulated, and that several mills in your neighbourhood are regulated, so as to have no injurious effect, either on the health, personal appearance, or morals of those employed in them?—I do think that mills may be so regulated, and several mills in my neighbourhood are so regulated, except that the hours of labour are rather too long.

"And these opinions are the result of twenty-seven years' experience?—Certainly, I do think the condition of the neighbourhood, in regard both to the circumstances of the working people, and the care bestowed on Sunday-schools, is better than it ever has been, and the tone of morals of the rising generation is superior."

The following evidence of the Reverend H. Alkin, Church of England Minister at Hyde, is peculiarly valuable, inasmuch as it comes from a man who has been lately transferred from an agricultural district to a manufacturing one, and who is consequently in a favourable condition for making a comparison between them. The prejudices to which he was formerly subject,

subject, and which he now candidly and honourably confesses, are, I doubt not, a sample of those which actuate a majority of the supporters of factory bills in agricultural districts, and proceed from the same cause,—ignorance of the question. Lancashire Distinct.

“Will you have the goodness to state the observations you have made on factory labour?—I was previously much prejudiced against it, inasmuch as I had heard of the dreadful immorality that was practised in such districts; but upon inquiry and observation, I do not see that working in factories has a greater tendency to generate immorality than working at a plough, provided the master would put his mill under proper regulations.

“What regulations would you suggest?—I would suggest that an infant-school should be attached to each factory, and a national-school as a centre to receive them after they arrive at a certain age, and that the course of instruction should be purely moral and religious. I am led to make this observation by the extremely good behaviour displayed by 700 children belonging to Mr. T. Ashton's school during the whole time of morning service; this attention I attribute to the discipline of the infant-school, many of them being not more than six years of age. As an individual, I have received more respect from the common people in Hyde than in any other district I have resided in.

“What is your opinion as to the general effect which passing the Ten Hour Bill would have on the mass of operatives?—It would undoubtedly decrease their wages, and give them greater inducements to waste their time in intoxication and idleness. Before I had visited the mills, I was so prejudiced on the subject that I signed a petition in favour of the Ten Hour Bill; but since I have become better acquainted with them, my opinion has changed, and I think them as well treated in factories as in any other employments.”

The three first of the above witnesses were ministers of the Established Church residing in Manchester, and whose names were in a list of clergymen given me by an advocate of the Ten Hour Bill, from which list I selected them at random. I will add one more statement respecting factory morality, taken from the evidence of J. Halton, the Stockport overseer, who on his examination delivered in a paper, by which it appears that the aggregate number of illegitimate children born to factory women in the town of Stockport, for the last eight years, is 173; to non-factory women, 108; and as the factory population is to the non-factory as six to one in this town, it follows that the former are nearly four times as moral in respect of chastity as the latter.

An exception, however, to this general praise of their morality must be made with respect to their observance of oaths and regard for truth. But their errors on this score should be leniently judged of, as they have been literally forced on them by the legislature. This subject will be alluded to hereafter.

The factory population, in point of comfort and general condition, seems to be considerably superior to the agricultural, and in some instances, were it not for the factories, the farmers would hardly be able to sustain the burden of the poor-rates.

In Gorton there is a factory, erected eight years ago, which employs 711 persons, out of the 2,623 which the township contains. The overseer states, (*page 131, First Report*), “were it not for the factory, the farmers could not support the poor, as the factory produces hardly any paupers, and pays one fourth of the poor-rates. This year it will pay 160*l.*, and last year it paid 180*l.*; and the poor from the factory only cost 6*l.* 10*s.* in the year, owing to two small children being left by their father, the book-keeper, who died suddenly.” In this village the hatters, who form a considerable part of the population, “could not support themselves was it not for sending their children to the factory.” It appears also that during the three years which the overseer, Mr. Stanley, has been in office, not a factory workman has ever applied for relief, except one woman with two children, widow of the book-keeper above mentioned. In this township the poor-rates are levied on every house, and the names of the defaulters in paying them having been published in 1827, 1828, and 1829, it appeared that there was not one person employed in the factories among them. One woman cost the parish from 12*s.* to 14*s.* a week till her family found employment in the factory, from which time their earnings have been 30*s.* weekly, “and she is as well off as any in the neighbourhood.” (*Page 130, First Report*.)

The mode of living of the factory workmen will be seen from the following extracts (*page 130, First Report*):—

“What do the factory operatives usually live on?—They wont take any thing but the best of flour, potatoes, and mutton. I hardly go into one house but what I see they have
(D. 2.) beer;

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beer; and they have five meals a day; breakfast at eight, lunch at eleven, dinner betwixt twelve and one, their bagging at four, and supper about seven.

"For how many of these meals do they leave the mill?—Breakfast, dinner, bagging, and supper; they only lunch in the mill, on beer, and bread and cheese.

"Do they eat meat every day for dinner?—I think generally they do; they live full as well as most labouring people; better than farmers in general; they would not eat the same flour as is eaten in farm-houses.

"Do they live better than the hatters and hand-loom weavers?—Yes, they do; the hand-loom weavers are the most miserable part of the population; they scarcely see meat once a week."

Mr. Butcher, overseer of Salford, Hulme, and part of Manchester, says, (*page 62, First Report*), that the factory operatives "in a general way have fresh meat about twice a week, fried bacon two days a week, and liver and a little bacon generally on a Friday, and the two other days bread and cheese, bread and butter, and water-gruel." The overseer of the township of Heap, in answer to my question concerning the usual diet of the factory operatives, says, (*page 141, First Report*), they have either tea or coffee for breakfast, and fresh meat for dinner, and tea in the afternoon; and for supper, porridge, which some of the poorer classes have in the morning. The same witness also states, that the factory operatives are better off than any other class, except perhaps general mechanics, and that he has not had to relieve more than one spinner since he came into office. A remarkable table will be found in the evidence of Mr. Thomas Ashton, (*page 87, First Report*), which gives the population and poor's rates in Hyde for every year since the factory system began, being a period of thirty years. It will be seen by reference to that table, that while the population has increased 760 per cent., the poor-rates have only advanced 56 per cent., and there was a considerable balance in the overseer's hands when the last year's accounts were drawn up.

Several of the habitations of the Manchester poor are low, damp, ill-ventilated, and surrounded with filth. This is especially the case in Little Ireland, and the neighbouring district, which is inhabited chiefly by Irish. This, however, the most destitute part of the population, does not in general work in factories; but it would be a great improvement in their condition if they did, as the worst room in a factory is a palace of health and comfort in comparison with their miserable dwellings. The factory workmen are usually in a very comfortable condition, many of their houses displaying neatness, and even elegance, in their arrangements; and when I visited them at dinner-time, the occupants were generally eating fresh meat and potatoes. But it is in the country that the superior condition of the factory population is principally displayed; and I do not believe that any part of England can show instances of comfort and prosperity surpassed by that which is enjoyed by cotton-workers in country districts. The cottages of the workmen in Hyde comprise each two sitting-rooms, a pantry, a privy in a small yard walled, and two large rooms up stairs. Several of the houses contained books; and I give as a specimen the literary furniture of one of them, taken at random. The house belonged to Samuel Broadbelt, a spinner, earning 30s. a week, besides coals and house-rent, the expences of which are subtracted from his wages by his master. His books were a volume containing 292 Hymns, Cottage Comforts, Scott's Force of Truth, Wesley's Hymns, the Panorama of London, the Reform Bill, Mackenzie's Biography, Columbus's Discovery of America, Robinson Crusoe, a small novel, a monthly periodical, the United States Co-operative Journal, and a volume containing Chapone's Legacy, Gregory's Legacy, and Pennington's Advice. It would be an injustice to compare these dwellings with those of agricultural labourers, to which they were far superior in every respect, judging from what I have seen of the two classes. The workmen in these country factories are, as I have stated before, much more healthy-looking than in towns; and in the weaving department, where girls are mostly employed, the not unusual ruddiness of their faces attests the wholesomeness of their occupation. These observations apply equally to Gorton, Wilmslow, Stayley Bridge, and in fact to all the country places I visited; and it is my firm belief, that there is not a better or more certain mode of benefiting a country village than by establishing a cotton factory in it; the population will ever after be furnished with a constant, a well-paid, and a healthful employment. I could not find, that in these districts there was ever a desire among the workmen for the Ten Hour Bill, but, on the contrary, they seem to feel that contentment which their situation so fully warrants.

Perhaps,

Perhaps the best test that can be produced of the flourishing condition of the workmen engaged in the cotton trade is the wages they receive, which are so large as would appear almost incredible to those accustomed to regard the scanty earnings of the agricultural labourers. The average of the wages paid to all the persons employed in Messrs. Lees's mills at Gorton amounts to 12s. weekly per head; and as the establishment numbers 711 workmen from nine years of age upwards, we may imagine the wealth that this factory must diffuse in the neighbourhood. The average of the men's wages employed at Mr. Ashton's mills at Hyde is 21s. a week, while those employed out of the factory only receive 14s. But the following table of the wages paid in forty-three of the principal mills in Manchester will give an accurate idea of the earnings obtained at different ages.

SCHEDULE of the Number of Persons of various Ages, distinguishing Males and Females, employed in Forty-three Cotton Mills in Manchester, the average clear Weekly Earnings of each Age and Sex, the Per-centage which each Age and Sex bears to the whole Number employed, and the Per-centage of the Total of each Age relatively to the Gross Total employed.

Ages.	Number of Males.	Average clear Wages per Week.		Per-centage of Numbers.	Number of Females.	Average clear Wages per Week.		Per-centage of Numbers.	Number of each Age.	Per centage of each Age.
		s.	d.			s.	d.			
From 9 to 10	498	2	9 $\frac{3}{4}$	27 $\frac{7}{8}$	290	2	11 $\frac{1}{2}$	15 $\frac{5}{8}$	788	4.58
10 - 12	819	3	8	4 $\frac{6}{8}$	538	3	9 $\frac{1}{2}$	31 $\frac{3}{8}$	1,357	7.87
12 - 14	1,021	5	0 $\frac{1}{4}$	57 $\frac{7}{8}$	761	4	10 $\frac{1}{2}$	43 $\frac{3}{8}$	1,782	10.34
14 - 16	853	6	5 $\frac{1}{2}$	47 $\frac{7}{8}$	797	6	4 $\frac{3}{4}$	45 $\frac{5}{8}$	1,650	9.57
16 - 18	708	8	2 $\frac{1}{2}$	41 $\frac{7}{8}$	1,068	8	0 $\frac{1}{2}$	62 $\frac{3}{8}$	1,776	10.30
18 - 21	758	10	4	43 $\frac{7}{8}$	1,582	8	11	91 $\frac{1}{8}$	2,340	13.58
21 and upwards	3,632	22	5 $\frac{3}{4}$	21	3,910	9	6 $\frac{1}{2}$	22 $\frac{6}{8}$	7,542	43.76
	8,289	-	-	-	8,946	-	-	-	17,235	—

Of all the common prejudices that exist with respect to factory labour, there is none more unfounded than that which ascribes to it excessive tedium and irksomeness above other occupations, owing to its being carried on in conjunction with the “unceasing motion of the steam-engine.” In an establishment for spinning or weaving cotton all the hard work is performed by the steam-engine, which leaves for the attendant no manual labour at all, and literally nothing to do in general, but at intervals to perform some delicate operation, such as joining the threads that break, taking the cops off the spindles, &c. And it is so far from being true that the work in a factory is incessant, because the motion of the steam-engine is incessant, that the fact is, that the labour is not incessant on that very account, because it is performed in conjunction with the steam-engine. Of all manufacturing employments, those are by far the most irksome and incessant in which steam-engines are not employed; and the way to prevent an employment being incessant is to introduce a steam-engine into it. And these remarks, strange as it may appear, apply peculiarly to the labour of children in cotton factories. Three fourths of the children so employed are engaged in piecing at the mules, which, when they have receded a foot and a half or two feet from the frame, leave nothing to be done,—not even attention is required either from spinner or piecer, but both stand idle for a time, which, if the spinning is fine, lasts in general three fourths of a minute or more. Consequently, in these establishments, if a child remains during twelve hours a day, for nine hours he performs no actual labour.* A spinner told me that during these intervals he had read through several books. The scavengers, who have been said to be “constantly in a state of grief, always in terror, and every moment they have to spare stretched all their length upon the floor in a state of perspiration†,” I have seen idle for four minutes at a time, and certainly could not find that they ever displayed any symptoms of the condition described in this extract from the Report of the Factory Committee.

If we wish to discover occupations which are really laborious, irksome, and incessant, we must go to those trades in which not only no steam-engine, but no machinery whatever, is

* A piecer however generally attends two mules, whose motion is alternate, and then his leisure is six hours instead of nine.

† See Report of Factory Committee, p. 325

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used. The employment of milliners' girls is one of this description; they are engaged in it for a far longer period of time than the factory children; and I have it in evidence from medical gentlemen (*page 120, First Report*), that their health is more seriously affected by it than that of persons in factories. Surely bending over a needle sixteen hours a day cannot be deemed otherwise than laborious, irksome, and incessant in the highest degree. But the case of the pin-headers is the most glaring instance of the absurdity of the principle that sets a brand on those trades alone in which steam-engines are employed. The unhappy children engaged in this business, who are of a far tenderer age than any in factories, (as I have seen them working at it before they have reached their sixth year,) have to sit twelve hours daily at a table, with their bodies continually bent in the form of the letter C, their eyes intently fixed upon the pin-heads, and both hands and feet in perpetual motion.

At Derby there is a magnificent establishment for making bobbin net, in which the whole of the machinery is moved by a steam-engine. The same machines are used at Nottingham, with the difference that they are there mostly worked by hand, and consequently the labour is infinitely heavier. In the Derby factory the labour required is so slight and discontinuous, and the machine performs its work with such admirable precision, that many of the workmen were literally at sleep in their places when I visited the establishment; yet they are included in the Ten Hour Bill, while their Nottingham brethren are omitted. The master of the establishment complained of the serious loss he should sustain by the operation of the Bill, and asked me what justice there was in subjecting his business to it, in which the labour of the workmen was evidently so light, while the harder-worked operatives in the factories of his Nottingham rivals were left untouched? I could not answer his question.

The most irksome employment connected with cotton spinning is "picking" cotton for fine work, an operation which is generally performed by the youngest children in the following way: A fleece of cotton is hung up before the window, and the child, standing constantly in the same place, with its head about six inches from the fleece, picks out the particles of dust that are lodged in it. The wearisomeness of this occupation must be, beyond all comparison, greater than that of the piecers or scavengers, as the child cannot stir from its place, but must keep perpetually looking at a bit of cotton; but it is not assisted by the steam-engine, consequently it may be worked twenty-four hours, or any number of hours, without intermission, for any thing Lord Ashley's Bill says to the contrary. In the coarse factories this work is done by the steam-engine, and therefore the child who attends the operation has not a tenth part of the labour to perform which it otherwise would have. Here, then, it is protected by a factory bill.

Occupations which are assisted by steam-engines require for the most part a higher species of labour than those which are not; the labour of the head is then partially substituted for the labour of the muscles; in fact, it becomes in some measure skilled labour, and like all skilled labour is paid highly, as the tables of wages I have given prove. In no other way can I account for the comparative high wages which factory workmen, whether children or adults, obtain. "Batting" cotton seems by far the most laborious employment in a factory; it is performed entirely by women, without any assistance from the steam-engine, and is at least as hard as thrashing corn, to which it has a great similarity; yet those engaged at it do not earn on an average more than 6s. 6d. weekly, while, close by, may be seen women, and even children of fourteen, earning double and treble that sum at stretching or power-loom weaving, in neither of which occupations is the labour one quarter as great. In power-loom weaving especially the manual labour seems to be really nothing, as those who work at it frequently follow the motion of the lay by leaning on it with their arms, with the view of taking exercise; it is also the healthiest of mill occupations. Were factory work in every department seriously detrimental to health, this circumstance would account for the high rate at which it is paid; but the evidence proves so strongly that such is not the case, that we are compelled to resort to some other explanation.

Shall I be better believed, when I state that I myself a short time ago was impressed with the common prejudice respecting steam-engines, viz. that employment at them tended to degrade a man into a machine, and deaden all the powers of his mind? The minute attention I have been compelled to pay to this subject in discharging the duties of this commission has convinced me that this is an idle and groundless notion, and in fact, in

most instances, it is the reverse of truth. Whatever employments have this degrading tendency are among those in carrying on which no mechanical ingenuity has been applied: a workman of a superior class is always required to attend delicate or complicated machinery. Of course a child nine years old cannot be expected to display much skill in its work; but its education in factory labour must begin at that age, or it never can become a good skilled workman. Those who enter a mill at sixteen or seventeen always labour under great disadvantage, and earn comparatively little wages, from their inability to acquire that degree of tact and skill necessary to the due performance of factory work.

The objections urged against the factory system, from its collecting a large number of persons together under one roof, are equally unfounded. In truth, so completely erroneous is this notion, that the complaint ought to be just the reverse, that there are not enough large factories, and too many small ones. I invariably found that the large factories were those in which the health, general comfort, and convenience of the workmen were most attended to, and where they were the best off in every respect. And it would be an extraordinary circumstance if it were not so. When a large body of workmen are collected together under one employer, he is enabled to allow them many indulgencies at a comparatively small expence, but which would cause a serious outlay to the proprietor of a small establishment. It is the interest of a master manufacturer to do all that lies in his power to accommodate his men, as he thereby is enabled to attract the best workmen into his employ, owing to the good repute which his factory will bear among them; therefore, a large establishment is certain to be best regulated, as it can be most cheaply well regulated. Accordingly, the greatest mills I always found to be the cleanest, the machinery most securely fenced off, and the hands of the neatest and most respectable appearance. In Messrs. Birley and Kirk's mill, the largest in Manchester, the workmen are allowed as much hot water as they please at tea-time, without charge, and persons are employed to take it to them. In Messrs. Strutt's mill at Belper each hand is allowed a pint of good tea or coffee, with sugar and milk, for one halfpenny, and medical assistance gratis; a dancing-room is also found for them in this establishment. It could never answer to put up a copper to heat water for twenty or thirty persons, nor could tea or coffee be sold at this price unless a large number were supplied with it. Mr. Ashton can afford to pay for all the surgical assistance that is yearly required by his 1,173 workmen, as he can contract for it at six guineas a year; did he employ only a twelfth part of that number he assuredly could not get a surgeon to take the contract at a twelfth part of six guineas. Mr. Bott undertakes to attend to all the ailments of the operatives in Messrs. Lichfield's mills on payment of a halfpenny each weekly; he certainly would refuse to attend twenty persons for 10*d.* a week.

But the misrepresentations that have been put forth on the subject of the fine spinning mills are perhaps the most extraordinary of all. I have no hesitation in saying that the labour in the fine spinning mills of Manchester is lighter, pleasanter, and not less healthy than in any other mills in the town. The lightness of the labour is owing to the slowness with which the machinery moves in spinning fine numbers. The mule in spinning No. 30 or 40 makes in general three stretches a minute; in the high numbers only one, and sometimes less. This fact I have ascertained with the utmost precision by frequently timing the motion of the machine, holding a watch that marked the moments in my hand. During at least three fourths of this minute the piecers, five of whom usually attend two mules, each containing 360 spindles, have literally nothing to do; they then stand listlessly by, their attention engaged by any thing but their work, till the mule recedes, when they instantly proceed to piece the threads which break or are purposely broken (as in fine spinning, if a knot is perceived in any part of the yarn, it is intentionally broken). The piecing cannot take up long, as the mule has no sooner arrived at the frame than it instantly begins to advance, and when it has got about a foot and a half or two feet from the frame, it is impossible to reach over to the rollers, and the period of idleness begins. There is far less work for the scavengers to do in fine spinning than in coarse, on account of the waste being so much smaller, and consequently this part of the business is usually done by one of the piecers. Another superiority which these establishments have over the coarse spinning factories consists in the small quantity of dust that is evolved in every stage of the process; in fact, in the spinning rooms there may be said to be no dust at all.

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I was particularly struck with the portly appearance of many of the spinners in these establishments; and one of the fattest men I saw in Manchester was spinning No. 180 in Mr. Houldsworth's factory, and he had been engaged in this work seventeen years. Another whom I questioned had been a fine-spinner for thirty-six years, and he was employed in spinning No. 200 at the moment I spoke to him. One of the most violent witnesses for the Ten Hour Bill that I examined (*Thomas Wilson, page 65, Second Report*), says that his health was much better when he worked in a fine spinning mill than in a coarse.*

If, then, factory work injures neither the health, the morals, the appearance, nor the education of those engaged in it, the Board will probably wish me to explain why the workmen wish for legislative restrictions. This question has been partly answered in a former page, but it may be necessary to state their reasons more at length.

They reckon, and perhaps justly enough, that a law compelling the master to turn away all under eighteen after ten hours' work, will compel him to turn away the adults also at the same time, and stop the mill. They see that the fixed expences of the establishment remaining the same, and a smaller quantity being produced, the prices of the cotton goods would probably rise. A rise of prices they have usually found to cause an increase of wages, and therefore they conclude that a rise of prices caused by the Ten Hour Bill will do so: thus committing the blunder of confounding a rise caused by increased demand with a rise caused by increased difficulty of production; whereas it is clear that the two cases would be attended with the essential distinction of an increased consumption accompanying the one,—a decreased the other. They go on to argue, that, in consequence of less being produced, new mills will be erected to supply the deficiency; that this will cause a demand for fresh hands; and thus the workmen out of employ will be engaged, and prevented from beating down wages by their present competition for employment. So the Ten Hour Bill is to cause all to be in work for ten hours instead of twelve, and wages are to be the same for the former time as the latter.†

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* It may be thought irrelevant to state that the fine spinning mills, which have been made the object of such deadly hostility, are, scientifically speaking, the glory of Manchester. Nothing can exceed the beauty, delicacy, and ingenuity of the machinery, the order in which it is kept, or the extraordinary results it is capable of producing. I have seen cotton spun in them of the number 350; in other words, a pound of cotton is stretched to the incredible length of 294,000 yards or 167 miles, and is then sold for twenty-five guineas, the original cost of it having been 3s. 8d. It is the only part too of the cotton-trade in which England is absolutely unrivalled, as, with the exception of some attempts that have been made in France, no other nation can approach us in this department of manufacturing. The export of fine yarn is increasing more rapidly than of any other description of cotton goods. It is impossible to keep the coarse spinning-mills in the same order as the fine, owing to the greater dust occasioned by the work, and the machinery not being required of equal delicacy. They have, however, other peculiarities, which make them at least as worthy of attention. For instance there is not unfrequently attached to them a department for power-looms, which are among the most extraordinary machines in a factory. I have stood by one of these looms and minuted its operations with a watch when I have seen it weave seventy-two square inches of cloth in a minute, without any human being attending to it. In factories thus furnished the cotton enters in a raw state, and comes out as cloth, and of the numerous machines through which it has to pass, including the steam-engine which moves them all, there is not one that does not seem to demand the utmost stretch of human ingenuity to bring it to its present state,—not one that does not condense in its formation the result of at least 100 patents, or that has not required in its invention the united efforts of at least 100 minds. Yet this is the manufacture,—a manufacture which comprises the most perfect and beautiful specimens of human art, and which employs £15,000,000 of our capital and the shipping of half the kingdom,—of which the very existence is to be compromised by the indulgence of a mistaken philanthropy; I say the very existence, because I am confident that nothing short of its extermination will meet the views of the philanthropists. Mr. Birley says in his evidence, that the only remedy for the evils complained of is to interdict the trade, (*page 33, Second Report*), and I cannot see any other, if the charges brought against it are true.

† An unexpected confirmation of the truth of this assertion, respecting the object with which the operatives sought the Ten Hour Bill of Lord Ashley, has lately appeared. A meeting was held in Manchester, on the 25th November 1833 to form a "Regeneration Society," the object of which is to limit the hours of work for all labourers to eight, and at the same time to compel the payment of the present wages. The movers in this business are the same persons who were the chief agitators of the Ten Hour Bill; and one of the resolutions passed at the meeting is, "That Messrs. Oastler, Wood, Bull, Sadler, and others, be urgently requested to desist from soliciting Parliament for a Ten Hour Bill, and to use their utmost exertions, in aid of the measures now adopted, to carry into effect, on the

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To refute in detail the glaring absurdity of this reasoning would be to waste the time of the Board; but it is my firm belief that could the operatives, who are now such strenuous advocates for Lord Ashley's Bill, be persuaded of the fallacy of these opinions,—could they be made to understand what must be the real effect of the measure on wages,—they would form committees throughout the manufacturing districts to oppose it. Owing, I suspect, to the discussions to which our arrival in Manchester gave rise, many of the operatives towards the conclusion of our stay seemed to have some doubts of the correctness of their first opinions respecting the effect which Lord Ashley's Bill will produce, and particularly as to whether the masters could not manage to work their mills beyond the ten hours with adults alone, in which case they would doubtless resort to night-work. The possibility of this result taking place has thrown them into consternation; and well it may, for I believe that of all the modes of demoralizing a manufacturing district the practice of working all night long is the most effectual. This probably is not the reason with the Ten Hour Bill operatives for dreading this result; it is sufficient for them that it would upset all their schemes for the advancement of wages. But whatever be their motives, there are certainly ample grounds for regarding such a prospect with unfeigned terror. Mr. Robinson, the proprietor of a large spinning and weaving establishment at Duckenfield, who tried night-working once, says, in his evidence, that he would "rather give up manufacturing than try it again." Mr. Aaron Lees states, that during two years, when his father worked a mill in the country by night, "more bastards were produced than had ever been known in the same period before; the quantity was doubled."

This apprehension, that the masters may find means of working their factories for a longer period than ten hours, employing only hands above eighteen, or during night with hands above twenty-one, (that is, with hands who say they are above eighteen or twenty-one,) has induced many of them to advocate the plan of putting a restriction on the moving-power, and thereby preventing the steam-engines or water-wheels, which set the mill machinery in motion, from working more than a certain number of hours daily. It cannot be necessary to enumerate the insurmountable objections to this proposal. Mr. Hindley says in his evidence, that on his pressing Sir John Hobhouse to make this alteration, when the Factory Bill of 1831 was under discussion, he was told by Sir John that "it would be ridiculous to mention it in the house." The Gloucestershire manufacturers characterise the proposal as "worthy of the darkest ages, when governments took on themselves to control, direct, and punish all handicrafts, trades, and callings for any diversity in their operations." This is not strongly enough expressed.

It will doubtless be asked, how the stories of factory cruelty have had their rise? So far as they come from the Factory Committee of last year, and refer to my district, I think I can explain it. The selection of witnesses to be examined before that body was most extraordinary. Of the eighty-nine who gave evidence, only three came directly from Manchester, though it is the largest manufacturing town in the kingdom; and being almost wholly devoted to the cotton trade, which is as yet the only business subjected to a factory bill, some important information respecting the experience of former factory bills, and the probable effects of the change it was proposed to make, might reasonably be expected from it. Of these three witnesses, not one was a medical man, a manufacturer, or a clergyman. The first was a dresser of yarn, and is now one of the two delegates sent by the Lancashire

1st of March next, the regulation of 'eight hours' work for the present full day's wages.' " The truth is, the experience of last session has shown that Parliament will not readily fall into the tyrannical absurdity of placing restrictions on adult labour, and therefore the leaders of the factory clamour are trying to produce this result by means of unions. And as they had succeeded in persuading their deluded followers that the Ten Hour Bill would enable them to get twelve hours' wages with ten hours' work, so they now declare that if the men will unite together, and determine to work only eight hours, they may still get the same wages as at present. I do not mean to say but that the men are perfectly justified in attempting to raise their wages so long as they do so by honest means. I am only animadverting on the deceit which they practised by pretending that the good of the children was their motive for wishing the Ten Hour Bill, and supporting their statement by the most unparalleled falsehoods and calumnies against the masters. All this is so perfectly notorious in Lancashire, that it must be superfluous to any one who has visited that great manufacturing district; but the fraud was so long successful elsewhere, and, perhaps, still is, that it cannot be too often repeated, that the whole and sole view with which the working classes advocated Lord Ashley's Bill was to get the wages of twelve hours with the work of ten.

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workpeople to London to forward the passing of the Ten Hour Bill, and whose colleague is a man named Doherty, who (it is right that the character of the leaders in this business should be known) originally came to Manchester with a forged character, and was subsequently imprisoned for two years for a gross assault on a woman; the second is the keeper of a small tavern in the purlieu of the town; the third is an atheist.

The first, being in London, I could not re-examine, but he refused to corroborate his former evidence before the Central Board of Commissioners, when requested to do so by them; to the second I sent a summons, and he refused to attend; the third did attend, and the following is the commencement of his examination:

"Have you any objection to take an oath?—I would rather not. I have no objection to kiss the dirty book. Truth is what I swear by, and wherever I meet her I embrace her.

"Do you believe in a God?—Can you tell me what God is? God is incomprehensible. I am a moral character. When I was in London I lived in Mr. Carlile's shop, Fleet Street. I acted in the capacity of a servant to Mr. Carlile and the Rev. Robert Taylor."

Considerable part of this man's evidence, which fills nine folio pages of the Committee's Report, refers to charges thirty and forty years old; but every specific accusation which he or his two compeers had made against the cotton mills I ascertained, from witnesses of the utmost respectability, to be absolutely false.

The Board is at liberty to suppose that all the former part of this Report is false; that all the tales about the hardships of factory children are true; that their health is destroyed, their morals undermined, their bodies deformed, their education neglected; in short, that all the attacks on the factory system are founded in undeniable truth. This being granted, I assert that it is borne out by the evidence, that factory bills may increase but cannot remedy the evil, and that their most likely effect will be, as it always has been, to leave things just as they were before, with the addition of evils far greater than those they pretend to cure.

This opinion is principally founded on the result of former factory bills, six of which have been passed, and every one, without exception, has met with the most signal failure—a failure arising from causes which obviously depend on the principle on which a factory bill must be founded, and which do not proceed from unskilfulness in the framing of former legislative enactments on this subject.

Many of the witnesses talk about the present Bill being obeyed in certain places; but they always mean, that in such places the mills do not work more than twelve hours,—the time to which those under eighteen are restricted by the present law. But long before any factory bill was passed it was never the practice in many places to work more than twelve hours; in fact, in most cases, according to the evidence of several master manufacturers, it does not appear profitable to do so, and the mill-owners do not exceed these hours, not in deference to the law, but in deference to their own profit and convenience; and Parliament has no more right to take credit to itself for causing these hours to be worked than if it were to pass a measure enacting that attraction should vary inversely as the squares of the distance, and then declare that the laws of nature were obedient to its commands.

By the present law no child can legally work in a cotton-mill till it is nine years of age, and this provision is perpetually broken through by the parents, whose desire to get their children employed is too strong for any legislative barriers to resist. This part of the law never seems to be willingly transgressed by the masters, who, in fact, have no interest in so doing, and would not in general object if all under twelve were prevented working in cotton mills. Of the 11,444 persons engaged in the Stockport factories, only 1,420 are under the age of twelve, consequently the turning them all out of the mills would but slightly inconvenience the masters, but it would be violently opposed by the workpeople, on account of the loss of wages they would sustain; many would have to maintain six or seven children in idleness, or to put them to trades less profitable than factory labour.

In German Street Sunday-school, which contains nearly 1,000 children, most of whom are employed in factories, I discovered, by means of a careful examination, nine children under the legal age working in cotton mills. To every one of the establishments where these children were employed I sent a note, requesting to know if the masters had received certificates that they were of the proper age. The answers to my circular were just what I expected. In six of the above instances the masters knew nothing at all of the children concerning whom I inquired, since they were both employed and paid by their workmen, and in three instances

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by the parents of the children. In every factory the children are constantly changed by the workmen; sometimes in fine spinning mills as many as sixty or seventy changes take place in a day, without it being possible for the master or those immediately under him to know any thing about the matter. Yet in every one of the above nine instances the master was liable to a fine of 20*l.* for having these children in his mill, though it was almost impossible for him to prevent it. In one only of these cases had a certificate been given by the parent that the child was of the legal age; and in another the parent's declaration to that effect was thought sufficient. I would much sooner believe the child than the parent in a case of this sort, as the practice of parents to tell falsehoods with the view of getting their children employed is well known; and it may be surmised that a child of this tender age is too unsophisticated to tell other than the truth. This, however, is not always the case, as the following instance will show. One of the above-mentioned children was employed in Mr. Clarke's mill, and on visiting this establishment I asked the boy, in Mr. Clarke's presence, what his age was; he answered, "going ten." On charging him with having told me on Sunday that he was "going nine," he said that his mother had told him to say he was "going ten" whenever he was asked his age in the factory. Thus the effect of the Factory Bill is to make even children lisp falsehoods.

Mr. Clarke said that he had endeavoured some time ago to prevent children under nine being employed in his factory, but he found it useless to attempt it, and only got a bad name among his workmen for inhumanity, when he turned away their children on account of their being under the legal age. Mr. Clarke is one of the largest and most respectable manufacturers in Manchester, and one of the very few masters who is favourably inclined towards the Ten Hour Bill, as will be seen from his evidence; his opinion, therefore, on this point may be implicitly relied on.

It is worthy of remark that Mr. Clarke and Mr. Hindley, the only two master manufacturers who were strongly biassed in favour of the principle of a factory bill, both agree that it is quite useless to have any restriction on the age of children working in mills. Mr. Hindley says—

"What clauses of Lord Ashley's Bill do you object to specially?—The certificate clause, as opening the door to perjury on the part of the parents.

"Would you rather have no restriction regarding age?—I think it would be almost impossible to have an effective bill if any distinction be made with regard to age.

"Then you wish to be understood as asserting that it is quite useless to have any restriction as to the age of children working in mills, and that no factory bill will ever be observed except one which restricts the moving-power to a certain number of hours daily?—Yes, that is my opinion; at the same time I conceive that the object would be obtained by restricting the moving-power as regards such operations as are generally connected with the labour of children."

Mr. Clarke examined:—

"Have you any objection to the proposed Bill of Lord Ashley?—The only objection I have to it is the certificate clause. I think that prevarication and perjury will be encouraged by that clause.

"Do the parents frequently sign false certificates about the ages of their children?—They do; that I know of my own knowledge.

"Then the parents don't like Sir John Hobhouse's Bill?—These are only particular cases where they do this; my principal objection to certificates is, that it is a temptation to parents, led on by the overlookers, who are paid in general by piece-work, to commit perjury.

"Then what enactment would you propose to prevent children under the proper age working in factories?—That is the most difficult part of our business, the children being generally engaged by the operatives.

"Do you think it unjust to put a penalty on the masters for having children in their factories under the legal age when they do not engage them?—I don't know how to answer that question. I would have no enactment regarding the age of children in cotton and woollen mills, as the operatives engage them; in worsted, and silk, and flax mills, I believe the masters pay the wages of the children."

The natural observation to be made on this evidence is, "What, then, is the use of a factory bill; where is the case for it?" The following extracts will show the shifts to which the parents are put in order to avoid the present restrictions regarding age.

Abraham Docker examined:—

"There was one boy of the name of John Fisher, a piecer at Mr. Mellor's mill. I have seen that boy from six o'clock in the morning till twelve without meat, and beaten twice in the forenoon. He was under the care of a spinner. Mr. Mellor did not allow any to be

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beaten that was under his care. The reason why this child had no meat was, the parents had given a note that it was eighteen years of age, in order to keep it in employment.

"Do parents often do that?—Yes, and to a very great extent, too, in the town of Stockport.

"Then why do parents wish for this Bill?—It is only the parents, when the masters threaten to turn away all under eighteen, that signs those notes, where they have four or five of a family.

"Then such parents will dislike the Bill?—No; it is only for the present time to keep the child in work.

"Parliament has passed a bill to prevent children under eighteen working more than twelve hours a day; parents tell lies to evade this bill: won't they tell lies to evade Sadler's?—Yes, they would, except Mr. Sadler's Bill positively said they should cease working at six o'clock at night, and not begin before six in the morning.

"This Bill will prevent children working in mills in a greater degree than Sir John Hobhouse's does. If the parents dislike Hobhouse's Bill on that account, will they not dislike Sadler's worse?—Well, it is my opinion that the parents will sign false certificates, unless those certificates come from places where they are registered. * * * * *

"I am of opinion that great evil rests among many of the overlookers; and the reason is, that the overlookers have many friends, and they wish to oblige those friends by evading the law by getting their children into situations, and requesting them to bring false certificates, in order to prevent the master from being brought under fine.

"Then the way to oblige a poor person is to enable him to evade that clause of Sir John Hobhouse's Bill which restricts the children under a certain age from working in a mill?—Yes."

George Lees examined:—

"Do you believe that parents often sign false certificates of their children's age, to get them employed?—Yes; I know that within a very short period hands have brought certificates to me proving that they were eighteen, when I am quite confident they were only twelve. The parents feel the present restrictions as to age very severely. I am certain that both myself as manager, and my master, are liable to be called before the magistrate any day and fined for employing children under the legal age, without the possibility of helping ourselves. At certain periods we slacken the engine to give notice to the hands under eighteen to leave the work; and we then send a man through the rooms to watch them out, which there is great difficulty in doing, from their desire to continue working. They frequently hide themselves till the person sent through the mill to see them out has passed. I have known them to hide themselves in the water-closets. After that Bill of 1831 was passed all the young hands suddenly became eighteen years of age, or within a month or two, which was the usual expression if they were taxed with telling falsehoods. I believe there are many places in Stockport of persons calling themselves eighteen who are really under the age, for the sake of working.

"Then you think the effect of this Ten Hour Bill would be to increase perjury?—I am quite of opinion it would; self-interest would induce them to break through every legal impediment.

"In case of the present law, as it respects working under the legal age, being broken, is it easy to obtain evidence of it?—We have never had a case of it, but the parent would be as likely to deceive a magistrate as the employer, having the same motive for it."

Thomas Hadfield and Robert Bottom examined:—

"Is the present law often violated?—Yes; many parents, after the passing of the last Bill, signed the names of their children that they were more than eighteen, to get them work.

"Do they frequently sign that they are nine when they are not?—Yes; many of the parents do that."

Robert Roberts examined:—

"Are parents in general eager to get their children employed before they are of the legal age?—Yes, they are.

"Are applications frequently made to you by parents to get their children into the factories before the legal age?—Yes, sometimes.

"Are children of a very young age particularly advantageous in the employments carried on in your factory?—No, not at all; they are rather disadvantageous; they are childish, and have not the sense and ability to do what is wanting."

James Greenough examined:—

"Do parents frequently desire to get their children employed before the legal age?—Frequently. I now keep a book, and make them sign their place of birth and their age.

"Do you ever find that they sign to an untruth?—Yes; even men that get 30s. a week will do this, for the sake of getting a child in, who will earn 1s. 6d. to 2s. a week. I have frequently known spinners to bring their infants secretly into the mill to do the work of a scavenger, and on the overlooker coming into the room they will pretend that the child has only brought some meat or drink, or will send them behind the wheel out of sight.

"Then

"Then it is considered as a favour by the operatives to take their children into the factory under the legal age?—They would consider it as a favour if we would allow them."

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The effect of the present law at Warrington is remarkable. There are three considerable trades in the town in which children are employed,—pin-heading, fustian-cutting, and factory work. I made a minute inspection of a great number of cottages in the poorest part of the town, and entered into conversation with the parents respecting the labour of their children. I found that they considered factory work the best employment for them, then fustian-cutting, and then pin-heading; and their order of preference seemed reasonable enough. I have given an account of pin-heading in another page, (*page 41, Second Report*) from which it will be seen what grounds there are for placing this horrid employment last in the list. The parents however said, that as they were prevented sending their children to the factory till they were nine, (that is, till they could pass for nine), they were compelled to send them to the trades of fustian-cutting and pin-heading, in which the labour is far harder, worse paid, and in the latter frequently causes a deterioration of the eye-sight. I inquired whether factory work, and the work of a scavenger particularly, injured the children's health; they declared it did not, and that they would send their children to the factory sooner than they do now, instead of putting them to the more laborious employments of fustian-cutting and pin-heading, were it not for the law. Some of them had heard of the project of preventing children under fourteen working more than eight hours daily, and declared their children could not live with the wages of eight hours. On my asking one woman whether it would be likely that parents would say their children were fourteen, when they were not, she said, "Ya, I'm sure I would; would'nt you."* She went on to say that she knew many who said they were eighteen and twenty-one, when they were several years younger, for the sake of getting work in factories. Here we see clearly the effect of enforcing a measure founded on the principle of a factory bill. Supposing such a bill observed, it compels parents, who would otherwise send their children to factories, to send them to harder employments, and thus the exact contrary result to what was intended is produced. Indeed nothing but harm can follow unless all occupations which are harder than factory occupations are included in the bill; that is, the bill must have effect in every private house in the kingdom; and then, as many of the children could earn nothing, and many families can only live by the assistance of their children's earnings, such families must go to the parish, or perish immediately. If, on the other hand, the bill is not observed, it inevitably gives rise to falsehood and perjury, and the case is just the same as it would have been without any factory bill at all, with the addition of these demoralizing crimes.

If former factory bills had been simply inoperative, there would have been little to complain of; but they become inoperative through the falsehood and perjury to which they give rise, and their main effect has been to demoralize, without producing one particle of good to balance these tremendous evils. On the passing of the last factory bill of 1831, the Manchester masters entered into an association and subscribed funds, with the view of laying informations against all who should infringe it. Many informations were laid, about a twentieth part of which succeeded, when it was found utterly impossible to get any more convictions, as the perjury of the witnesses placed an effectual barrier to the operation of the act; and I believe that not more than one conviction was obtained without forcing the commission of this crime. In about three weeks these attempts to enforce the bill ceased, and from that time to this it has been practically a dead letter, though the Manchester masters have the strongest possible motive to bring all under its operation, as working only twelve hours themselves, their neighbours who work longer depress the price of yarn.

A slight consideration will show the difficulty that must always arise in getting evidence to prove the overworking of children. If a mill work more than twelve hours with hands under eighteen years of age, it must be either with their consent or without it. If it is with it, they

* The people were in error with respect to the age, which was to be thirteen and not fourteen, and as a year makes a great difference in the ability to earn money at this time of life, their objections would doubtless have much diminished had they known the truth. The proposed measure of the Central Board would also in great measure have prevented children being worked under the legal age by the deceit of the parents.

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will not give evidence for their own sakes, and will overawe by threats any of their number who might wish to convict their master of infracting the law; if it is without it, they must be obviously compelled to work these long hours to get a living, and then they will not give evidence against their masters, for fear of being turned away and losing their bread; and without evidence from the workmen employed in any factory, it is almost impossible to prove that the law has been infringed in it.

In point of fact, the majority of operatives do not wish to work less than twelve hours daily, and for some this is not enough; and the attempt to control their wishes by the bill of 1831 has been violently resisted by them. The following is the evidence of Mr. Aaron Lees, a large master manufacturer, on this topic:—

“Did the bill of 1825 make no change in the hours of working?—Not the least.

“Have the legislative enactments on this subject been usually so treated by all the country factories?—I think they have.

“Do you think it possible to enforce any legislative restriction whatever in country factories?—Impossible, on these grounds: it is not for the interest of the workman, and when it is not his interest to obey the law no law can be enforced; whatever penalties the legislature should inflict, if we had asked our workpeople they would have guaranteed us against them all. In Manchester the masters subscribed considerable sums of money, and succeeded in enforcing Sir John Hobhouse's Bill in the town. They endeavoured also to bring the country mills under the same restrictions, but the thing was impossible, from the difficulty of obtaining informations. In Manchester the operatives are, generally speaking, of a much lower description, living in dirty ill-ventilated cellar-holes, in unpaved streets, wholly unprovided with privies and every other decent convenience. In the country the operatives live in a more respectable way, their characters are superior, their dwellings bespeak comfort and cleanliness, and they are in general satisfied with their condition, and are unwilling to lose the benefit of working moderate long hours. Consequently, when persons were sent amongst them to get information they were told they must go about their business, or they would throw them into the canal.”*

The precise form of evil which the Ten Hour Bill would assume it is impossible to foresee, but certain it is, that nothing but harm could come from its operation. In page 104 of the First Report will be found some laborious calculations of Mr. Houldsworth, by which it appears that if the increased cost arising from the Ten Hour Bill should be borne by the operatives, and if it should fall on the consumer, the diminished consumption that would ensue would cause the ultimate effect to the workmen to be nearly the same; the reduction of wages in fine spinning would be from twenty-five to twenty-eight per cent.

I was particularly struck with the case of one man, named Aaron Jackson, which will be found in p. 25 of the First Report. The effect which the last Factory Bill had on him is very instructive. Here was an honest workman, who was bringing up a large family without assistance, the whole of whom were in full health and employment, and contented. A factory bill is passed, which instantly places him under the necessity of either signing to a falsehood, or starving. Let it not be said that this is a solitary instance; it is one of several, which I could myself point out, and which will be multiplied into hundreds, and, perhaps, thousands, if the Ten Hour Bill should become law, and all factories be subjected to its cruel regulations.

The effect which the measure would have on our foreign trade is one of the most alarming of the prospects it holds out; and that the fear of foreign competition is not chimerical there are unquestioned facts to prove. Switzerland has actually superseded us in spinning forties, which are the staple number in the cotton trade. Our export of this article to that country, which used to be very large, ceased about six years ago; and Mr. Passavant, a merchant largely engaged in the exportation of yarns and goods, says, generally, that the competition of foreign spinning “is fast increasing” (*page 38, Second Report*).

The following evidence of Mr. Greg states some curious facts with respect to foreign machinery and foreign hours of working mills. With reference to this latter point, a table will be found in page 44 of the First Report, from which it appears that the hours of labour

* Mr. Lees, who is a country mill proprietor, is certainly mistaken in this account of the dwellings of the factory operatives in Manchester. They are undoubtedly worse off than in the country, but not by any means to such an extent as he supposes. His description is true of many of the houses of the non-factory population.

in the cotton mills in Manchester are less than those worked in any other part of the world where the cotton manufacture is carried to any extent.

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“Have not the late improvements in machinery come from America?—Four of our most valuable and ingenious machines have been introduced from America; the patent reed-making, patent card-making, Dyer’s patent roving-frame, and Danforth’s throstle. It may be remarked here, respecting the hours of mill labour in America, that if, in a country where there is no surplus population, where ready employment at good wages is within every one’s reach, where land may be obtained at a dollar and a half an acre, where the wages in mills seem to be lower in proportion to those in other occupations, compared to what they are in this country, plenty of operatives are found to work themselves in those mills, and to bring their children to work in them, it is clear that the people there do not consider employment in mills for that length of time (thirteen to fourteen hours per day) to be a grievance. We have no reason to suppose that employment in the mills in America is free from any objection to which it is exposed in this country.”

But it is obvious that whether foreigners have or have not machinery equal to our own, this is a point which forms but a small part of the question of foreign competition. As the sale of our goods depends in great measure on the lowness of their prices, the raising of them would cause a serious decrease of consumption,—a decrease which it is well known always greatly exceeds the ratio in the rise of price, (*page 32, First Report,*) and the more distant the market is, the more necessary it is to keep the price low, as the goods may otherwise be undersold by those made by the very simplest machinery. Mr. Ashton has at this moment a large quantity of cotton cloth lying at Singapore, on account of its being undersold by the hand-loom cloth of the Madras weavers, whose machinery is of the most primitive description. He received an intimation of this the very morning I examined him, and the letter which conveyed the intelligence I have printed in the 86th page of the First Report. It will be obviously absurd for him to send another yard of his cloth to the East after the passing of the Ten Hour Bill, and his men must never again expect to receive wages on account of work for the Singapore market.

There is one ingenious mode of preventing the evil effects of foreign competition, which has been suggested by Mr. Hindley (*page 49, Second Report*), and which, *were it adopted*, would doubtless answer the intended purpose; it consists in entering into treaties with foreign powers, binding them to pass factory bills.

That the cotton business has not lately been very profitable, and is consequently little capable of being trifled with by legislation, I will give a proof, drawn from a large manufacturer’s books, which I inspected for this purpose. The following table contains an accurate account of the condition which a cotton factory was found to be in when the expences and profits were calculated, as is customary every half year, for the last four years. The original cost of the establishment was 40,000*l.*; it contains 10,932 throstles, and employs 380 work-people. During the nine last years 442,000 lbs. have been spun on an average each half year, and 8,577*l.* paid to Government as duty on cotton in that time.

	Price of Cotton per lb.	Waste.	Wages, Rent, &c.	Cost of Production.	Sale Price.	Profit.	Loss.
	d.	d.	d.	d.	d.	£ s. d.	£ s. d.
1829:							
March -	-	-	-	-	-	-	660 11 11 $\frac{1}{4}$
September	5.161	.65	4.93	11.20	11.22	147 9 8 $\frac{3}{4}$	
1830:							
March -	5.70	.65	4.65	11	11.10	113 5 2 $\frac{3}{4}$	
September	6.43	.59	4.39	11.41	11.42	161 6 3 $\frac{1}{2}$	
1831:							
March * -	7.03	-	4.49	11.42	11.19	- - -	406 7 8
September	5.98	.75	4.47	11.20	10.53	- - -	1,589 2 11 $\frac{3}{4}$
1832:							
March† -	5.50	.68	3.62	9.80	10.12	414 6 8 $\frac{1}{2}$	
September	6.48	.54	3.72	10.75	10.23	- - -	1,012 3 9
1833:							
March -	7	.65	3.75	11.40	10.50	- - -	1,687 17 9 $\frac{1}{2}$

* New ten per cent. duty imposed.

† Deduction of rent was made from £2,046 to £1,250, on a valuation made conformable to the depression of the times.

Lancashire District.

Perhaps a little explanation may make the table clearer.

The second column contains the price that was given for cotton per pound at each period, the third the loss per pound sustained in spinning it, the fourth the expenses of fixed and circulating capital incurred in spinning a pound of cotton, the fifth the whole cost of production, and the sixth the price at which the article was sold. The difference between the fifth and sixth columns constitutes the profit or loss in converting a single pound of raw cotton into thread; and the result, as respects the whole quantity manufactured in each half year, is given in the two last divisions of the table. It will be apparent how very delicately the balance is held between profit and loss, depending sometimes on the fiftieth part of a penny in the price of a pound of cotton. It is also worthy of remark, that the trivial addition to the cotton duty in 1831 had apparently the effect of instantly causing the loss to mount up to 1,589*l.*, or to nearly four times what it had been in the preceding half year.

The effect of the Ten Hour Bill on the silk trade would be to ruin it directly, and as effectually as if an Act of Parliament were expressly to prohibit the importation of another pound of raw silk into the country. The silk manufacturers seemed to give themselves little trouble about the objects of this Commission, considering, as it appeared to me, the proposed measure as so preposterous that it could never pass, or, if it were to pass, it would be repealed in the next session without an attempt to enforce it. This certainly was the feeling of the Derby silk-masters, upon several of whom I called, and was told by them what I had no doubt of before, that they would be instantly ruined by foreign competition if their factories should be subjected to the Ten Hour Bill. I inquired why they did not come and state these circumstances to me, as I was ready to take down any evidence they might tender; they replied, that they placed full confidence in their workpeople, who would not allow their masters to be ruined by the legislature, and who would quickly get the bill repealed, if it should ever pass. And I believe their confidence was not misplaced.

The Ten Hour Bill seems to have been framed in total ignorance of the relation that exists between master and workman in the greatest manufacturing districts, and to imply that the former are utterly void of all sympathy and good-will towards the latter,—that their sole desire is to oppress and tyrannize over them, and that between the two a constant barrier of distrust opposes an effectual obstacle to any mutual feelings of respect and regard. This idea is wholly unfounded, and I can bear ample testimony to its having been the case in my district, as Sir David Barry asserts it was in his, “that many traits of almost parental kindness on the part of the master, and of corresponding gratitude on the part of the servant, have been brought before me in the course of my inquiries.” The overlooker of Mr. Ashworth’s mills says of the children, (*page 133, First Report*), “I go round myself every morning, and see that they wash themselves after their breakfast; and if it is discovered that they have not done so, we talk to them and send them out to get washed. We find them in soap and towels, and both hot and cold water, as much as they please.” In towns the tie that binds together employer and employed is of course less strong; but in the country the feelings of attachment are not unfrequently pushed to an extent that could not easily be surpassed. The population surrounding a country mill, to the number of one or two thousand, are sometimes entirely dependent on its master for work and subsistence; but the master is equally dependent on them for the necessary services they perform; and whether it is that this mutual dependence is more apparent, or that the people are more civilized, it certainly seemed to me that there was less assumption of undue importance or manifestation of pride on the part of the master, and more esteem on the part of the workman, than I have ever witnessed in any agricultural district. The proprietors of these establishments frequently go to considerable expence in founding schools, and in providing for the moral improvement of those they employ, and in general they are perfectly aware that it is their interest to do so.* Yet these are the men on whom every epithet of abuse and contempt has been and is now daily heaped, who are denied to possess the common feelings of our nature, and whom it is proposed to fine, degrade, and imprison for crimes which they may unconsciously commit. To take a single instance:

* See evidence of Mr. H. Ashworth, taken before the Central Board, Second Report.

Mr. Thomas Ashton, than whom there does not exist a person who has been a greater benefactor to the district he inhabits, or who is held in greater reverence and respect both by the labouring population around him, of whom he employs 1,200, and by those in a higher sphere, who enjoy the benefit of his acquaintance,—this gentleman has built a school, (*page 83, First Report*), in which 640 children are instructed on Sundays in reading, writing, and arithmetic, with a library attached to it, where the operatives read after the conclusion of their work. He has also founded an infant-school, in which 200 children are educated; and two night-schools, where instruction of a superior character is imparted.* Yet if Lord Ashley's Bill were to pass, he might suddenly find himself compelled to pay the penalty of 60*l.*, and be sent to Lancaster Castle for a twelvemonth.

Lancashire District.

The injustice of the Ten Hour Bill is perhaps best displayed in the direct pecuniary loss it will inflict on the manufacturers. A master spinner frequently contracts to furnish a certain quantity of yarn in a given time, usually, of course, in as short a time as his machinery will enable him to perform the order with his present hours of work. Of course if a sixth of his time is deducted by the Ten Hour Bill, he will not be able to complete the order he may have on hand, and may be mulcted in a heavy penalty for this forced breach of contract. Leases are frequently given of rooms in a factory, each room containing a wheel connected by a shaft with a steam-engine in another part of the premises, and which wheel the lessor stipulates to turn at a certain speed for sixty-nine and sometimes seventy-two hours weekly (*page 69, First Report*). By the Ten Hour Bill, fifty-eight hours a week is to be the utmost time during which the engine can work, consequently the lessee may be compelled to receive nearly one fifth less than what he has contracted to receive and pays for. The following is the evidence of Mr. Barnes, the proprietor of a large water-mill, on this topic:—

“What is your rental for water-power?—About 800*l.* per annum, one fifth of which sum we should lose yearly in rental alone by the direct operation of Lord Ashley's Bill. All our losses from decreased production, &c. would have to be added to that sum, to make up the full sum of what we should lose.”

Mr. Bradley examined:—

“What effect do you expect that the Ten Hours' Bill will have on your profits?—If we have not some deduction of rent from our landlords,—and we can have no legal claim to it,—the loss will be, in rent alone, upwards of 700*l.* a year, including our gas, which we rent in the same way as we do our water; but even without this deduction our loss, from decreased quantity produced, must be very great.”

As Mr. Bradley has given a detailed account of the persons employed in his mill, with these data we shall be able to get to some approximation of the whole loss which will be sustained by the manufacturers included in this Bill. Mr. Bradley's mill employs 877 hands, and if Mr. Greg's calculations (*page 36, First Report*), of the whole number of persons employed in cotton manufacturing be correct, and I have reason to suppose it to be below the truth, the loss in rental alone, or, if they pay no rent, the depreciation of their property, will amount to 128,840*l.* per annum, or to a capital of 2,576,900*l.*, being the sum which will be directly taken away from the capital employed in the cotton manufacture by the operation of Lord Ashley's Bill. And if we suppose the number of persons engaged in all the other trades included in the Bill to amount in the aggregate to one half that in the cotton trade, and the loss to be only propor-

* The following extract from this gentleman's evidence will show the way in which the establishment of his factories has affected the morality of the neighbourhood:—

“Can you state any thing with respect to the morality of your workpeople?—We have had only one prosecution for felony or larceny in our establishment for thirty years, and I can say that there are very few, if any, in the neighbouring mills. I have made inquiries from the neighbouring minister, who has christened the principal part of the population, and he finds, by looking over the register, that there are fewer bastards in proportion than there were forty years ago, and fewer in the last ten years than in the previous ten.”

Lancashire District.

tionally equal, the penalty levied by this measure on the chief departments of our manufacturing industry would amount to 3,855,350*l.*

But, in point of fact, the penalty would be far greater than this, as the calculation does not include the loss sustained by the manufacturer from decreased production. There is still however a worse result even than these, as the Bill would prove a sentence of absolute extinction to nine tenths of the water-mills in the country, owing to the clauses restricting the working up of time lost by floods and deficiencies of water. Sometimes a water-mill can only work four hours daily (*page 88, First Report*), and of course liberty to work up time so lost is not less convenient to the master than to the workmen; the latter indeed would literally be in danger of starving without it, even though the Ten Hour Bill should be changed into a twelve hour one. Mr. Barnes calculates (*page 88, First Report*) that the effect of the Bill will be to impose a tax of one third of their amount on the earnings of his workmen.

The following is the answer I received from the proprietor of a large factory moved by water, in answer to a request of mine that he would make out the precise effect as regards wages (supposing them to remain at the same rate as at present) which the passing of Lord Ashley's Bill would have on his establishment.—

“ Sir,

Mottram, 14th June 1833.

“ In answer to your instructions on the 11th instant, we find if we are ordered to work only ten hours per day, the result will be as follows in our establishment :—Loss to the workpeople in wages, 3,330*l.* per year; loss to ourselves, from rent of mills, machinery, interest on stock and profits in trade, 890*l.* per year.

“ We remain, Sir,

“ Your very humble Servants,

“ G. & S. SIDEBOTTOM.”

But the truth is, the loss to Messrs. Sidebottom's workpeople would not only be 3,330*l.* per annum, but the whole of their wages. The water-factories could not work an hour after the enforcement of Lord Ashley's Bill; and the 100,000*l.* invested in the Compstall mills would be as completely confiscated as if Parliament were to pass a law directly taking that sum out of the proprietors' pockets. The above letter is not a correct answer to the question I proposed to Mr. Sidebottom, as it proceeds on the supposition that he will be able to work ten hours daily after the passing of the Bill; but to give a correct answer is a matter of great difficulty, owing to the irregularity of the flow of the water. One thing is certain; that the average work of water-mills under the Ten Hour Bill (i. e. if they worked at all, and it is next to impossible they should,) would not be more than eight and a half or nine hours daily. During the last fortnight of my stay in Manchester, Mr. Hadfield of Glossop had only been able to work his mills two days and a half weekly; and though this may be an extreme case, I could not hear of a single stream, nor do I believe that a stream exists in England, in which the water flows with uniform power.

The certificate clauses of the Act may give rise to some curious results. The masters, to save themselves from the liability to heavy penalties and imprisonment, will of course be very particular in taking certificates of the ages of any children who seek employment in their mills. The certificate must be given by the natural or legal guardian of the child; and if the parents are dead, and the father has omitted, as will most likely be the case, to appoint by deed or will a legal guardian to his child, the guardianship devolves on the Lord Chancellor, who may thus find an unexpected addition to his duties, in having to appoint guardians or sign certificates for a few thousand children annually, or the children may starve.

The seventeenth clause, which compels proprietors of factories to build all their rooms in which children are employed ten feet high clear, may also be productive of unlooked-for effects. The garrets of a factory, like most other garrets, are built with a shelving roof, so that while the height in the middle of the room, where the workmen stand, is considerable it is not more than four or five feet at the sides; it is generally, too, from its position, the
cleanest,

cleanest, airiest, and quietest apartment in the mill; but after the passing of the Ten Hour Bill, a person who erects a factory must either go to a considerably increased expence in raising the walls, or he cannot use the garrets at all, in which case in many instances a couple of acres of surface will be wholly lost to him. It is also the usual practice to build the mule-spinning rooms a little lower than the restricted height, and the card-room considerably higher. A manufacturer was one day showing me over his establishment, which had been begun on a magnificent scale, but only half of which was completed. He had built his card-rooms twelve feet high, and his spinning-rooms nine feet six inches, and he was lamenting that the symmetry of his establishment would be totally destroyed, and himself put to a considerably greater expense, if he should be compelled to build the remaining part of dimensions so different to the former. However, he has hit upon a way for satisfying both his own pocket and the wishes of the legislature. He will take off six inches from the card-room, where it is wanted, and put it on to the spinning-room, where it is not; and thus as the latter department is as airy as possible at present, the spinners will be no better than they were, the carders may be half suffocated, the law will be obeyed, and the factory legislators will have their way.

The 24th clause compels the owners of factories to send quarterly to the clerk of the peace an account of the time their engines have been working the preceding quarter, and on the facility given for inspecting the time-book of course depends in great measure the efficiency of the Act. Now, as the clerk of the peace for Lancashire resides at Preston, thirty-six miles from Manchester, the necessity of taking a journey of seventy-two miles, and paying the fee for inspecting the book, with the chance of finding that there is no ground for complaint, will probably deter any one from laying informations grounded on this, the chief clause of the Bill, which thus contains a provision for nullifying itself, where, if it is wanted at all, it is most wanted. *

But the most obvious inconsistency in the Bill consists in this, that being founded on a principle of humanity to children, it actually leaves untouched those trades in which children are most hardly used. The evidence I have collected contains accounts of several occupations in which children of a far tenderer age than are generally employed in factories are exposed to hardships infinitely greater. It may be perfectly right to protect infants from hard usage in cotton mills; but this being conceded, the philanthropists have committed a mistake in beginning at the wrong end, and have unaccountably passed over the most glaring instances of cruelty. They have found out where children are beaten with straps and sticks; but not where they are beaten with pick-axes. They have found out where they work in temperatures between seventy and eighty; but not where they work in 112, and where it is hot enough to melt tallow-candles. They have found out where they are imperilled from carelessness at machinery; but not where "their lives are never safe," and they are in constant danger, unavoidable by care, of being smothered or blown into the air. They

P. 81, 1st Report.
P. 40, 2d Report.
P. 48, Ibid.
P. 79, 1st Report.
P. 80, 1st Report.

* I beg to add in a note one consequence of the last clause of Lord Ashley's Act, which runs thus:—"And be it further enacted, That the words 'mill' or 'factory,' and 'mills' or 'factories,' used in this Act, shall be taken to comprehend and include all buildings and premises used in any manufactures comprehended in this Act." Suppose a miller's wife, addicted to the labours of the spinning-wheel, should find a mode of turning it by a strap connected with part of the mill machinery. Her house then becomes a factory, and subject to all the regulations of Lord Ashley's Act. The only way for her to guard herself against informations will be, to turn away all her children between eighteen and twenty-one out of the house all night long, those between nine and eighteen after they have been in the house ten hours during the day, and her children under nine must be turned out of the house entirely. Should she not do this, if a spiteful neighbour ever discover that the spinning-wheel is going after seven in the evening, he may summon her before a magistrate, and in case she shall not be able to prove a negative, she may be convicted in the penalty of 20*l.* without appeal. And if she should omit to keep a daily account of the time the wheel is going, and to send a statement of it to the clerk of the peace every three months, together with a certificate that she has observed the Bill, she may be fined 100*l.*, and for the third offence of this nature she may have to pay 300*l.*, and be sent to the house of correction for a twelvemonth.

Lancashire District.

P. 43, 2d Report.

P. 79, 1st Report.

P. 81, Ibid.

P. 119, Ibid.

P. 81, Ibid.

P. 79, 81, Ibid.

have found out where they are exposed to dust; but not where they are exposed to the fumes of prussic acid. They have found out where they have sometimes to work at night, amid the glare and heat of lamps; but not where they never work otherwise, even by day. They have found out where their work sometimes subjects them to deformities; but not where this result is almost unavoidable from their working in a position "regularly bent." They have found out where their places of work are eight or nine feet high; but not where they are eighteen inches. They have found where they have to move no weight at all; but not where they have to move four hundred weight. They have found out where they are sometimes unable to eat much from want of appetite; but not where they are sometimes unable to eat at all from want of water, or from the apprehension of literal sickness. In a word, they have found out where their labours, though hard, are comparatively light and easy, and have disregarded those occupations in which infant slavery is so severe as would seem to make life a torment, and death a mercy.

Every one of the above instances of cruelty is an absolute fact, certified on oath; but it may be doubted whether they do not convey a fallacious impression,—whether the account of these hardships does not appear to people at a distance more terrific than is justified by the reality; or, at any rate, whether in every occupation, whatever may be the inconveniences which labourers in it have to undergo, there are not some compensating advantages, which place it on an equality with trades apparently the lightest. It may possibly turn out, that the true philosophy of the case is to be found in the answer of an old woman who had passed all her life in a cotton mill, and who insisted upon coming to give evidence before me, and to state her opinion of factory labour. As she had brought up a large family, some of whom had worked in cotton factories, and others in a coal-mine, which latter appeared to me, and would also, I should think, to every impartial person, to be a very hell upon earth or in the earth, for infant labour, I thought she was in a condition to make a comparison between these several trades, and accordingly asked her, which was the worst trade for children in Bolton, where she resided; her answer was, "Take winter with summer, one's equal to t'other." A factory bill goes on the principle that they are not equal, and that factory labour is the worst of all; but I have some suspicion that the old woman is in the right.

When I undertook the duties of this Commission, I firmly believed the tales that had been told of the miseries of factory children, but had some doubts whether the harsh provisions of Lord Ashley's Bill would cure the evil, and had determined to endeavour to discover some enactment that would; the numerous questions respecting the effect of former laws on this subject, and inquiries respecting alterations that suggested themselves to me, which my examinations contain, will prove my anxiety on this point. The conclusion to which I arrive is, that the tales of factory cruelties are untrue, and that if they were true the Factory Bill of Lord Ashley could do no more than increase the evil; and that all factory bills, from their very nature, cannot but have the same effect. The true interests of humanity, of justice, and of morality, require that not only no new factory bill should be passed, but that every former one be instantly repealed. If the parents are inhuman enough to overwork their children, Parliament cannot remedy the evil by setting itself up as the universal guardian of the offspring of the poor. The cause of the grievance obviously lies in the bad moral character of the parents; and on raising that character, which factory bills more effectually debase, depends the only chance of cure.

I perceive that my opinions are different from those of some of my colleagues who have visited other districts. But the discrepancy may be accounted for. Their attention was in great measure taken up by the flax, woollen, worsted, and hemp manufactures, while they saw comparatively little of the cotton; even Scotland only consumes a tenth part as much cotton as England. The counties which I visited were almost wholly devoted to the cotton manufacture, which being the only trade yet subjected to legislative restrictions, the evils which they have generated, and which of course could not be apparent to the other Commissioners, were brought under my notice with a force and a frequency so as to produce in my mind the conviction I have expressed of the worse than inutility of factory bills.

It has been said that the cotton factories are better regulated than others by reason of their having been brought under legislative control. This opinion I utterly disbelieve. The chief improvements in cotton mills seem to have arisen chiefly from the enormous individual capitals embarked in the trade, which rendered it possible to carry them into effect at a comparatively trifling expence, considering the numbers of workmen who were benefited by their adoption. They certainly have been made without any reference to the law. No factory bill ever compelled the master to put up the expensive machinery which is now to be seen in every mill for the purpose of carrying off the dust from the card-rooms and scutching-rooms,—or the large fans, which so effectually ventilate the apartments,—or to pay that attention to cleanliness in his mill which is proved by the evidence not to have been the case formerly,—or to supply hot water gratis to his workmen,—or to substitute the agreeable and equable temperature obtained by steam for the oppressive heat of stoves *, or to give express orders that the children should not be ill-used. Many of the best-conducted factories have continued to work to this day in exactly the same way as they were accustomed to do before the first factory bill was passed. The workmen in the silk establishments are equally well off with those in the cotton, and they have never been interfered with by the legislature. It was the custom to work the mills longer hours formerly than at present, and night-work was not uncommon, but the reason is to be found in the circumstance of the moving-power being almost always water, owing to which the hours of work were necessarily as irregular as the flow of the stream: at present, the steam-engine, which is of course under complete control, has almost superseded water-power.

But a stronger reason for these long hours lay in the temptation held out by the vast profit which for a considerable time attended the business of cotton-spinning,—a profit which has long since ceased, and which, as it proceeded from the supply of yarn falling below the demand, which had been prodigiously increased owing to the diminution of price consequent on the use of Arkwright's inventions, cannot be expected to recur. At present not a single mill in Manchester works by night, and only one in the immediate neighbourhood, and in that thirty-six persons only work at night out of 380, who are employed during the day.

Possibly some advantage may have been derived by turning public attention to the factory system, as people when they are the object of universal regard are generally on their good behaviour, and masters may doubtless have been induced by this motive, among others, so to model their conduct as to leave no semblance of ground for the unfavourable but unjust impression which prevailed against them. Legislation on these matters may indirectly have done some good in this way, but not to one tenth part of the extent of evil which has been its only direct and palpable effect.

I may seem inconsistent in holding the above opinions, and at the same time advocating, as I do, the Factory Bill suggested by the Central Board. † But this measure has no more claim to be called a factory bill than an education bill, and it is in its latter character that it has my approval, as here, unlike all former factory bills, it touches the only maintainable ground of systematic interference with infant labour. But it contains an amalgamation of two principles, a good and an evil one—an educational part and a factory part; and I should infinitely prefer to expunge the factory part, and make the educational part universal, as then all would be done that human legislation can do to cure the evils, which doubtless do attach to the factory system in common with every other system of labour. But public

* The rooms in a cotton-mill are heated solely for the convenience and pleasure of the workmen, and not on account of the work, with the exception of the dressing-rooms, where children are never employed, and the fine spinning rooms, which are very rare in comparison to the coarse, being less than a tenth part as numerous.

† The Bill that was eventually passed is in some respects different from the Bill suggested by the Central Board of Factory Commissioners. This Report was written but could not be completed in time to be presented to the Central Board previous to their being called upon to report, and consequently is not intended to refer to the Bill recommended by that body; but as it may contain matter that may be useful, I have thought it best to send it in unaltered.—E. C. T.

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Lancashire District. —
opinion must have a factory bill, and this seems to me far less objectionable than any that has yet been brought forward, and perhaps the best that under present circumstances could be passed. It certainly places all the checks that it seems possible to devise in the way of perjury, which it would seem to have been the object of all other bills, passed or proposed, specially to encourage. One thing is clear, if, owing to foreign competition and other causes, our manufacturers cannot work their mills a shorter time than at present, and this appears indisputably to be the case, the only way of lessening the labour of children is, to enforce the employment of different sets of hands. It seems inconsistent, to wish for the enactment of a factory bill, and at the same time to object to the system of relays.

5th August 1833.

E. CARLETON TUFNELL.

D. 3.

Lancashire District — *continued.*

**Dr. BISSET HAWKINS'S REPORTS ON LANCASHIRE,
DERBYSHIRE, and CHESHIRE.**

MEDICAL QUERIES

Issued by His Majesty's Commissioners for inquiring as to the Employment
of Children in Factories.

D. 3.

Dr. Hawkins's
Reports on
Lancashire,
Derbyshire,
and Cheshire.

1. HAVE you observed that the persons employed in factories usually attain old age?
 2. Have you frequently witnessed cases of the death of old persons who, immediately previous to their last illness, were engaged in factory labour?
 3. Do you happen to know the ages of some of the old persons who, immediately previous to their last illness and death, had worked in factories?
 4. Is the mortality amongst factory children greater than in other classes?
 5. Are the wives of factory artizans equally prolific as those of other classes?
 6. What proportion do miscarriages, still births, and fatal cases of pregnancy among the classes engaged in factory labour bear to those occurring in other situations?
 7. Are there any diseases or accidents to which factory children are particularly subject?
 8. Have you met with any and with how many cases of suicide during a certain period among those who are engaged in factory labour?
 9. Have you remarked that the factory classes are more or less addicted to the use of spirits than other persons of similar means?
 10. Is the use of opium, as an article of luxury, frequent amongst the factory operatives?
 11. Are the children of factory operatives inferior in stature to those of your other classes, and to those of the inhabitants of the rural districts in your neighbourhood?
 12. Has the factory life any tendency to check the complete growth in those of either sex who have reached the age of puberty?
 13. Have you met with many instances in which adults employed in factories have been compelled to quit their employment through diseases apparently induced by their occupations?
 14. Have you met with many instances in which adults employed in factories have been compelled to quit their employment through accidents occurring in the course of their labour?
 15. Are the factory operatives more or less attentive to cleanliness and ventilation in their dwellings than other persons of similar means?
 16. Are the factory operatives in the habit of teaching their children the use of spirits?
 17. What do you conceive ought to be the limit of factory labour for children from the age of 9 to 13, and for the youth of both sexes from the age of 13 to 18?
 18. Have the goodness to state which are the most unhealthy branches of factory labour in the order of their insalubrity?
 19. According to your experience, do any peculiar evils result to children from the high temperature at which some of the rooms in factories are maintained?
 20. According to your experience, do any peculiar evils result to children from night-work?
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Dr. Hawkins's
Reports on
Lancashire,
Derbyshire,
and Cheshire.

ANSWERS TO THE MEDICAL QUERIES,

AS TRANSMITTED TO DR. HAWKINS,

BY

S. A. BARDSLEY, M.D., Ardwick Green, Manchester.
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Mr. THOMAS FAWDINGTON, Manchester.
Mr. W. R. WHATTON, Manchester.
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Mr. ROBERTON, Manchester.
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JOHN BOUTFLOWER junior, Surgeon, Salford.
Mr. HARRISON, Manchester.
Mr. BROWN, Preston.
Mr. MOORE, Preston.
R. F. FORESTER, M.D., Derby.
Mr. DOUGLAS FOX, Surgeon, Derby.
Dr. BAKER, Derby.
Mr. HILL, Derby.
Mr. EVANS, Derby.
Mr. CHARLES BOROUGH, Derby.
Dr. BENT, Derby.
PETER HOLLAND Esquire, Surgeon, Knutsford.

Query 1. *Have you observed that the persons employed in factories usually attain old age?*

(Dr. BARDSLEY.)—My *limited* observation leads me to conceive that persons so employed do not *usually* attain old age.

(Dr. JAMES BARDSLEY.)—In the course of my hospital practice during the last ten years in Manchester I have met with many patients upwards of sixty years of age who have been employed in factories from an early period of life.

(Dr. ALEXANDER.)—I have not made any particular observations calculated to determine this point. My general impression, however, is, that the factory artizan is *not* long lived.

(Mr. FAWDINGTON.)—I am led to believe that few, except in the capacity of overlookers, are retained in factories beyond the age of forty-five, principally in consequence of their personal inactivity, *comparatively estimated*. A considerable number of individuals, however, may be found who, after having been engaged in factory labour during the greater part of their lives, have attained to *more* than sixty years.

(Mr. WHATTON.)—I have not made this observation, from want of opportunities.

(Mr. MANN.)—I believe a fair proportion attain old age; they are, however, seldom seen in factories upwards of *sixty-five*.

(Dr. PHILLIPS.)—See accompanying list.

(Dr. CHARLES HENRY.)—I have not. I believe that persons of advanced years, whose physical powers are declining, cannot be *profitably* employed in factories, and that their places are uniformly supplied by younger and more vigorous persons.

(Dr. SHAW.)—I do not believe that persons employed in factories *usually* attain old age. My reasons for this belief are deduced, firstly, from an extensive inquiry instituted amongst

amongst the operatives themselves ; secondly, from observing that persons so employed frequently have the appearance of premature old age ; and, thirdly, from the number of factory operatives labouring under chronic diseases who present themselves for relief at the dispensary to which I am physician between the ages of forty-five and fifty-five. The two latter points attach to many of the poor who are engaged in continued sedentary employments, particularly to the overworked and wretchedly lodged and fed hand-loom weaver. It ought also to be remarked that the factory system has not been long enough in operation fully to develop itself, or for us to determine whether the operatives who entered as children, and have been at work in many instances for twenty years or more, may not live to an advanced age.

(Dr. CARBUTT.)—I have no doubt that they do attain old age in the same or a larger proportion than the persons employed in other manufacturing operations ; but the fact, that there is no large proportion of old persons to be found among the workpeople of cotton factories, is accounted for by the circumstance that the great bulk of the cotton factories is of very recent construction. I am inclined to think, if an average were struck of the age of the factories, with the number employed in each, it would not reach twenty years.

(Dr. HULME.)—I have observed that they frequently do.

(Dr. HULL.)—From a wish to avoid being sent to London as a witness with respect to the employment of children in factories, I have neither visited any of the factories in this town and neighbourhood nor examined any of the children or adults engaged in factory labour, nor have I attended any of them when sick or hurt ; consequently I cannot give a satisfactory answer to any of the queries proposed to me by His Majesty's Commissioners.

(Dr. LYON.)—It is not usual to see old people actually engaged in factories, but I have no reason to doubt that many who have been so engaged attain a good old age, the women as housewives, the men in other occupations.

(Mr. ROBERTON.)—Few persons so old as fifty years of age are to be found employed in factories. This depends on a variety of causes, but chiefly on the want of the necessary degree of bodily vigour at such an age to spin the regular quantity of yarn in a given time, or, as it is termed by the trade, "to turn off full work."

(Dr. JARROLD.)—I have not known a single instance ; the age of sixty is seldom attained ; if there be any old factory men they will be found in the workhouse.

(Mr. HARRISON.)—I have seldom seen persons working in factories above fifty years of age, many who have been prudent or careful in their younger years having commenced some lighter employment, as shop-keeping or public-house occupier, or perhaps are partially supported by their children.

(Mr. BROWN.)—No ; the age that I have observed factory operatives to reach has been from about forty or fifty years, when they present the appearance of premature old age.

(Mr. MOORE.)—No, not usually, although I have known some individuals who have attained old age after being employed nearly all their lives in factory labour.

(Dr. FORESTER.)—Manufactories vary much in regard to their salubrity, and consequently their influence on the duration of human life. Occasionally no doubt persons employed in such factories as I have had opportunities of seeing do attain old age.

(Mr. FOX.)—I have observed that they frequently do.

(Mr. HILL.)—Yes.

(Mr. EVANS.)—I believe *very few* attain old age.

(Mr. CHARLES BROUGH.)—I have not particularly observed, but I know several old persons employed in factories, most of whom suffer from asthma.

(Dr. BENT.)—I have no certain data which enable me to answer this question satisfactorily, or to any useful purpose.

(PETER HOLLAND Esquire.)—I have not had the opportunity of making any other than general observations as to the age of persons employed in factories, and am ignorant of the age which they usually attain.

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Query 2. *Have you frequently witnessed cases of the death of old persons who, immediately previous to their last illness, were engaged in factory labour?*

(Dr. JAMES BARDSLEY.)—No, because few old persons are engaged in factory labour; for, owing to the sight becoming weaker as they advance in life, they are but seldom retained as spinners beyond the fiftieth year. This statement is the result of my medical observation of this class of artisans.

(Dr. ALEXANDER.)—I have not.

(Mr. FAWDINGTON.)—The reply is contained in the preceding remarks. I have no recollection of particular facts.

(Mr. WHATTON.)—I have not, I have never been acquainted with any such persons.

(Mr. MANN.)—No; for it is not usual for old persons to work in factories, being left at home, attending to the domestic wants of those so employed.

(Dr. PHILLIPS.)—See accompanying list.

(Dr. SHAW.)—An attendance upon some thousands of poor artizans has yet afforded me few opportunities of witnessing the death of old persons (say of sixty-five years) who, immediately previous to their last illness, were engaged in factory labour; and from inquiries I am led to conclude that few persons are employed in factories beyond fifty-five years of age, at least not as spinners.

(Dr. CARBUTT.)—I think I have not; from the cause already assigned; but I can answer the question precisely by a reference to my infirmary home-patient book, which I will send down to the York Hotel for the inspection of the Commissioners.

(Dr. HULME.)—I have.

(Dr. LYON.)—No. More satisfactory answers to these two questions might perhaps be obtained from the benefit societies.

(Mr. ROBERTON.)—Few persons so old as fifty years of age are to be found employed in factories. This depends on a variety of causes, but chiefly on the want of the necessary degree of bodily vigour at such an age to spin the regular quantity of yarn in a given time, or, as it is termed by the trade, "to turn off full work."

(Dr. JARROLD.)—I have no recorded evidence.

(Mr. HARRISON.)—Cannot recollect any cases with certainty.

(Mr. BROWN.)—No; but I have known many who have died at sixty-five or seventy years of age.

(Mr. MOORE.)—Yes; but whether their illness was occasioned by working in the factory or not I am not prepared to say.

(Dr. FORESTER.)—I am unable to answer this question.

(Mr. FOX.)—I have, very frequently.

(Mr. HILL.)—Yes.

(Dr. BENT.)—I have no certain data which enable me to answer this question satisfactorily, or to any useful purpose.

(PETER HOLLAND Esquire.)—I have not.

Query 3. *Do you happen to know the ages of some of the old persons who, immediately previous to their last illness and death, had worked in factories?*

(Dr. ALEXANDER.)—I do not.

(Dr. MITCHELL.)—I have taken no account of the ages of old persons employed in factories and cannot therefore return correct answers to this and the preceding queries.

(Mr. FAWDINGTON.)—Not remembering particular facts, of course I cannot answer this query.

(Mr. WHATTON.)—I do not.

(Dr. PHILLIPS.)—See accompanying list.

(Dr. SHAW.)—Answered in Query 2.

(Dr. CARBUTT.)—If I do, I can answer this in the same way as the previous question.

(Dr. HULME.)—I have known many more than seventy, and some nearly eighty years of age.

(Dr. LYON.)—I do not recollect to have met with persons engaged in factories above sixty years old.

(Mr. ROBERTON.)—Few persons so old as fifty years of age are to be found employed in factories. This depends on a variety of causes, but chiefly on the want of the necessary degree of bodily vigour at such an age to spin the regular quantity of yarn in a given time, or, as it is turned by the trade, “to turn off full work.”

(Mr. HARRISON.)—Not many exceed fifty years of age.

(Mr. BROWN.)—I have known a few persons who have arrived at a good old age; two more than seventy-six, and still living, one yet at work; the other ceased but recently to pursue his work as a spinner: others, after suffering a few years with some pulmonary disease, have died at different ages, usually about sixty. I do know a few from sixty-three to sixty-five who still continue to work.

(Mr. MOORE.)—I know a few individuals who had attained the age of sixty or upwards, but this number is comparatively small.

(Dr. FORESTER.)—I do not recollect the exact ages of any such persons.

(Mr. FOX.)—I do not know the exact ages; as far as I recollect, I have often known them to be upwards of seventy.

(Mr. HILL.)—Yes, several sixty and seventy years old.

(Dr. BENT.)—I have no certain data which enable me to answer this question satisfactorily, or to any useful purpose.

(PETER HOLLAND Esquire.)—I do not.

Query 4. *Is the mortality amongst factory children greater than in other classes?*

(Dr. BARDSLEY.)—I have not sufficient data to speak positively on the subject, but I am inclined to believe that the mortality among factory children does not exceed that of other children occupied by other employments in large towns.

(Dr. JAMES BARDSLEY.)—I have not collected a sufficient number of facts to warrant my giving a decided or satisfactory answer to this question.

(Dr. ALEXANDER.)—I am quite unable to affirm whether it be or not, never having set on foot or being acquainted with any inquiry affording an answer to this comparative question.

(Dr. MITCHELL.)—I am not aware of this.

(Mr. FAWDINGTON.)—I speak upon general impression, and as such should be inclined to answer that I believe not, except in the agricultural districts.

(Mr. WHATTON.)—Not that I am aware of. The bills of mortality here, or the registers of the collegiate church, could show the fact.

(Mr. MANN.)—I think not; a reference to some hospital books and sick clubs established in Sunday-schools in this town has satisfied me that either death or sickness are extremely rare, the payments being very small and the relief liberal.

(Dr. PHILLIPS.)—The mortality is certainly not greater among factory children than among other children of the labouring poor of Manchester not employed in factories.

(Dr. CHARLES HENRY.)—I am not in possession of any private numerical observations, but I have a strong impression, founded upon five years extensive experience of the diseases of the lower classes, as one of the physicians to the royal infirmary, dispensary, &c., that the proportion of deaths among factory children does not exceed that of other children not so employed.

(Dr. SHAW.)—The mortality amongst factory children is not greater than in other working classes. The mortality amongst children under six years of age is very high in Manchester, more than fifty per cent., so that the sickly plants are early cut off, whilst those reared are comparatively of good constitution. It is easy, therefore, to conceive that no employment, however laborious, could make much impression upon such a class of beings for the first few years. To see the effect of factory labour, or

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of any kind of labour, we must look onwards, and note the state of health between the ages of thirty-five and sixty. I think I might go further, and say that the mortality amongst factory children is less than amongst other working classes. Factory labour is better remunerated than any other kind of labour, consequently the children generally are better fed and lodged; they are less exposed to the vicissitudes of climate, greater attention is paid to their comfort, at least in the silk and cotton factories of Manchester, many of which I have frequently inspected. The reverse of all this is the case with the children of hand-loom weavers, fustian cutters, and the poorer day-labourers.

(Dr. CARBUTT.)—I believe not so great.

(Dr. HULME.)—No.

(Dr. LYON.)—I cannot offer a trustworthy reply to this question without a special investigation of the facts. My general impression is, that the mortality is, at the worst, *not greater* than amongst children of other manufacturing classes.

(Mr. ROBERTON.)—I do not think it is greater; I am acquainted with no facts which prove that it is greater; but it is necessary to mention that the mortality of children in Manchester from the fifth to the fourteenth year is little if at all higher than in agricultural districts. This is probably owing to the high rate of mortality under the age of five, by which all the more feeble and sickly are swept off, and only the vigorous (I speak of the children of the operative classes) live to attain their fifth year and upwards. In every hundred deaths in Manchester I have ascertained that nearly fifty-four occur under five years of age, while in country places the per-centage of deaths under five is something less than thirty-two; hence children in Manchester who live to the age when they can be legally admitted into cotton factories possess in general sound constitutions.

(Dr. JARROLD.)—The children are so frequently removed from factory to factory, and such as dislike or are incompetent kept at home, or pursue some other calling, that I have never been able to satisfy myself on the subject.

(Mr. HARRISON.)—I think that the mortality amongst the children of hand-loom weavers exceeds that of the factory children.

(Mr. BROWN.)—I believe the rate of mortality to be about equal with that in other classes of operatives.

(Mr. MOORE.)—No, not that I am aware of.

(Dr. FORESTER.)—I am inclined to believe it is; although, to institute a fair comparison between such children and those of artisans and agricultural labourers not so employed, more precise data are requisite than I am possessed of.

(Mr. FOX.)—I am unable to say whether a greater proportion die who work in factories than who work at other laborious occupations; there are certainly a greater proportion of the working classes die than of those who do not work.

(Dr. BAKER.)—I fear it is greater.

(Mr. HILL.)—I think not.

(Mr. EVANS.)—I think not.

(Mr. CHARLES BOROUGH.)—Decidedly so; many dispensary patients are children working in factories, the mortality amongst whom is certainly greater than amongst children of other classes, especially during the time of any prevailing epidemic.

(Dr. BENT.)—I have no certain data which enable me to answer this question satisfactorily, or to any useful purpose.

(PETER HOLLAND Esquire.)—For more than forty years I have professionally attended the *apprenticed* children at Messrs. Greg's factory at Styall in Cheshire. The average number of children has been about ninety; the proportion of girls to boys about two to one. I have no memoranda of the deaths during the first twenty years of my attendance; but I find that in the last twenty-two years there have been only seventeen deaths, or about one in one hundred and twenty. Of these seventeen, one died of small-pox; a second was accidentally killed when not engaged in any employment in the mill; the third, a healthy girl, imprudently eating a large number of unripe apples, was seized with vomiting, and died quite suddenly: so that of the seventeen deaths there remain only fourteen, or about one in one hundred and forty, which can by any possibility be attributed to causes connected with the employment in the factory. The conclusion would be, that so far as the apprenticed children are concerned (and my knowledge does not extend further), the average mortality is not greater than in other classes between ten and eighteen years of age; greatly less, as appears by the London bills of mortality, than in the Metropolis.

Query 5. *Are the wives of factory artisans equally prolific as those of other classes?*

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(Dr. JAMES BARDSLEY.)—I believe them to be equally prolific as those of other classes.

(Dr. ALEXANDER.)—I think they are.

(Mr. FAWDINGTON.)—I entertain little doubt in replying to this query in the affirmative.

(Mr. WHATTON.)—I have no means of answering this question; application at the lying-in hospital would ascertain this fact.

(Mr. MANN.)—They are to the full as prolific as any class I know of; and having attended some thousands of labours, I can safely say their children are as well formed and as healthy as those of any other classes.

(Dr. PHILLIPS.)—Most undoubtedly they are.

(Dr. SHAW.)—I am confident that the wives of factory operatives are equally prolific as those of other classes. This opinion I had formed from an extensive acquaintance with the working classes, and in order to prove or disprove its correctness, I have lately instituted inquiries, the result of which gives $4\frac{3}{4}$ children for each female (sixty females taken indiscriminately gave an aggregate of two hundred and eighty children); another series of females gave $5\frac{1}{4}$ children for each female.

(Dr. CARBUTT.)—I believe they are so. Formerly I kept an account of the number of children which each female patient who came under my care at the infirmary had had; but I have discontinued that for some years, and cannot find the record. I can therefore speak only from the impression left upon my mind.

(Dr. HULME.)—I can give no answer from experience to this question.

(Dr. LYON.)—Out of my department.

(Mr. ROBERTON.)—I have never made an estimate of the comparative fecundity of families employed in different trades. My inquiries, however, enable me to say that the married operatives of this town are generally prolific. In the case of one hundred and sixty married women (taken without selection), patients of the Manchester lying-in charity, whose average age was thirty years and a half, and average age of marriage twenty years and nine months, I found that they had borne six hundred and eighty-six children (about $4\frac{1}{4}$ for each woman) of which number five hundred and twelve (about $3\frac{1}{2}$ for each) lived to be weaned at the age, on the average, of fifteen months and a half. The duration of fruitfulness, too, would seem to be in no degree shorter here than elsewhere. Of ten thousand pregnant women who had presented themselves at the board of the lying-in charity, I ascertained that four hundred and thirty-six were upwards of forty years of age, and that of this number fifty-one had attained their forty-sixth year or upwards.

(Dr. JARROLD.)—They are believed not to be so; certainly they do not rear as many children.

(Mr. HARRISON.)—Equally, and probably exceed other classes.

(Mr. BROWN.)—Notoriously so.

(Mr. MOORE.)—Most undoubtedly so.

(Dr. FORESTER.)—I think they are, and such artisans generally marry very early.

(Mr. FOX.)—I think quite so.

(Dr. BAKER.)—I believe quite as prolific as other females.

(Mr. HILL.)—I think so.

(Mr. EVANS.)—The married women who work at the factory are less prolific.

(Dr. BENT.)—I have no certain data which enable me to answer this question satisfactorily, or to any useful purpose.

(PETER HOLLAND Esquire.)—Judging from the number of children I see playing about whenever I pass through Mr. Greg's village, I can have no doubt of their being at least equally so.

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Query 6. *What proportion do miscarriages, still births, and fatal cases of pregnancy among the classes engaged in factory labour bear to those occurring in other situations?*

(Dr. JAMES BARDSLEY.)—Not being engaged in the practice of midwifery, I am not qualified to answer this question.

(Dr. ALEXANDER.)—I have no extent of facts enabling me to form an opinion on this point, my professional intercourse with our operative population being almost exclusively confined to the treatment of those diseases which occur during the first fourteen years of life.

(Dr. MITCHELL.)—I leave these questions to be answered by those who practise midwifery.

(Mr. FAWDINGTON.)—I feel incompetent, from want of comparative observation, to answer this query.

(Mr. WHATTON.)—I cannot state. The lying-in hospital would be the proper place for inquiry.

(Mr. MANN.)—The proportion is not greater among the classes engaged in factory labour than others; and when they do occur the causes generally are a venereal taint, or its supposed remedy, mercury.

(Dr. PHILLIPS.)—This question will be best answered by the medical officers of the lying-in hospital.

(Dr. SHAW.)—Query 6. I am unable to answer, not having had opportunities of forming a correct opinion upon the point.

(Dr. CARBUTT.)—I cannot tell.

(Dr. HULME.)—I can give no answer from experience to this question.

(Dr. LYON.)—Out of my department.

(Mr. ROBERTON.)—I am not in possession of data which enable me to give a satisfactory reply to the whole of this query. My situation as one of the surgeons of the lying-in charity (which affords aid to upwards of 4,500 pregnant married women at their own homes annually) gives me the opportunity to know that difficult parturition is not more frequent here than it is reported to be in other large towns; and further, that deformity of the bones, so as in any dangerous degree to impede delivery, does not occur oftener than once in from 800 to 1,000 instances of parturition.

(Dr. JARROLD.)—I cannot answer.

(Mr. HARRISON.)—I do not think that factory females who are pregnant are exposed to more danger or have more difficult labours than any other operatives.

(Mr. BROWN.)—I do not think, when the respective numbers of the different operative classes are considered, that any greater tendency to abortion and to the diseases incidental to the puerperal state is met with amongst the factory females.

(Mr. MOORE.)—I am not able to answer, not having kept any regular journal.

(Dr. FORESTER.)—I have not the means of answering this.

(Mr. FOX.)—I am of opinion that there are more cases of miscarriages and still births amongst those females who work in factories, because they marry earlier, than other classes; where that is not the case, I think it is not so. From my own experience I cannot say that there are more fatal cases amongst the factory hands, but probably from the early marriages there are.

(Mr. HILL.)—About an equal one.

(PETER HOLLAND Esquire.)—I am quite ignorant of this.

Query 7. *Are there any diseases or accidents to which factory children are particularly subject?*

(Dr. BARDSLEY.)—Factory children are *greatly* exposed to accidents from machinery in factories, as can be certified by the records of the book of accidents in the Royal Infirmary.

Dr.

(Dr. JAMES BARDSLEY.)—I have had numerous opportunities of carefully remarking the ailments of the children of the poor, including amongst others factory children, and I have found them rather liable to chronic inflammation of the bronchial membrane, called by medical men "chronic bronchitis." Phthisis pulmonalis and scrofula prevail more amongst the children of weavers than of spinners, as far as my individual experience goes. Factory children are much exposed to accident, from their being constantly in contact with machinery, as is proved by the accident book of the Royal Infirmary.

(Dr. ALEXANDER.)—Spinal curvature, articular enlargement, distortion of the long bones, and scrofulous derangement of the glandular system are observed amongst them; a debility or atonic state of the whole frame is, however, their most usual ailment. Of the accidents to which factory children are liable I scarcely know any thing, as the Royal Infirmary is almost invariably resorted to for their alleviation.

(Dr. MITCHELL.)—I have not observed any.

(Mr. FAWDINGTON.)—I have observed a few cases of distortion of the knee and ankle joints; and as to accidents, the most frequent are to the fingers and hands in children, generally from carelessness or ignorance, before they have become acquainted with the nature of the machinery.

(Mr. WHATTON.)—Not that I am aware of, farther than the accidents which occur from the machinery occasionally.

(Mr. MANN.)—I do not know that they are subject to any diseases which are not common to every one. Accidents occasionally occur from the machinery; they are however, generally speaking, of a trifling nature.

(Dr. PHILLIPS.)—I was two years physician to the Ancoats Dispensary, and, although I took considerable pains to ascertain the fact, I could not discover that the factory children were subject to any disease or to any modification of disease to which other children of the *same district*, and not employed in factories, were not equally liable.

(Dr. CHARLES HENRY.)—I am not aware of any diseases which affect factory children from which the rest of the population are exempt, or of any to which factory children are more liable than other children. The accidents to which in common with all operatives working near machinery they are exposed have, I understand, been greatly diminished in frequency by guarding the revolving shafts.

(Dr. SHAW.)—Children employed in factories are liable to accidents from machinery, generally of a trifling kind, and often the result of their own carelessness, as in most factories the machinery is fenced off; to swelled legs, the result of long standing; to occasional distortion of the knee and ankle joints, arising from a similar cause; and to headaches and loss of physical strength: but with all these disadvantages I doubt whether factory children are in a worse condition than the children of many other artizans in this town, the evils I have alluded to being counterbalanced in some measure by better food, clothing, and lodging.

(Dr. CARBUTT.)—There are not any diseases to which they are particularly liable; they are liable to accidents from carelessness among the machinery, but not very much so.

(Dr. HULME.)—Without proper care, they may meet with accidents from the machinery.

(Dr. LYON.)—I was formerly accustomed to attribute to the inhalation of minute particles of cotton a hoarseness of voice commonly observed amongst the children working in cotton-mills; but this affection, I think, has been greatly diminished of late years. Accidents from machinery all are liable to; children, perhaps, naturally more so than adults.

(Mr. ROBERTON.)—I am not aware that children in the cotton factories of this town are more liable to certain diseases than other children differently employed. Since the practice generally obtained of casing the machinery there have been comparatively very few accidents.

(Dr. JARROLD.)—Factories engender no specific disease, but accidents frequently occur.

(Mr. BOUTFLOWER.)—I have frequently seen them suffering from distortion of the knee inwards and of the foot outwards, and also from the œdema erythematicum of the legs.

(Mr. HARRISON.)—The usual diseases of children are common to them. Many of them are affected severely with scrofula. Most of them are vaccinated. Accidents of a serious nature occasionally happen, though I believe that great precautions are taken by the proprietors.

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- (Mr. BROWN.)—Yes; glandular enlargements, rheumatic inflammation, &c. of the joints, and to various forms of diseased structure and disordered functions in the different tissues of the pulmonary organs; but I am of opinion that these different forms of disease are only met with in persons of a strumous constitution, and developed by this kind of occupation. They also occasionally receive lacerated injuries in the hands, originating in almost every instance from their own inadvertency or misconduct.
- (Mr. MOORE.)—They are more liable to consumption and stomach complaints than others. Accidents from machinery are not so frequent as formerly in consequence of the improvements.
- (Dr. FORESTER.)—The children employed in some factories are certainly liable to accidents from the machinery, and occasionally very dreadful ones. The diseases to which such children are subject depend on the nature of the manufacture, the different circumstances under which similar factories are conducted, the construction of the buildings, the attention paid to cleanliness, ventilation, and temperature, and the duration and severity of labour. Speaking from an experience of thirty years, during twenty of which I was physician to the General Infirmary here, I think I am warranted in saying that pulmonary diseases and disorder of the digestive organs, with general debility of the system, are very frequently met with in the children employed in the cotton, silk, and tape mills in this town and neighbourhood.
- (Mr. FOX.)—They frequently suffer from injuries of the fingers, and occasionally of the arms and other parts, from carelessly letting such parts get into the machinery whilst at work.
- (Dr. BAKER.)—*Diseases*: severe dyspepsia and gastrodynia, menstruation deficient or absent, tubercular or bronchial consumption; I allude particularly to females. Of 821 poor persons who have attended at my own house (belonging to Derby and its vicinity) 423 have laboured under dyspepsia, and of these 319 have also had gastrodynia. Many of these have worked in mills, but I cannot state the proportion.
- (Mr. HILL.)—No particular disease, but liable to accidents.
- (MR. EVANS.)—Factory children are more frequently subjects of scrofula than other children.
- (Mr. CHARLES BROUGH.)—Factory children are very subject to chronic bronchitis, which generally terminates in consumption.
- (Dr. BENT.)—I believe they are less robust than others, and liable to those complaints which arise from constitutional feebleness, more particularly pulmonary disease, worms, &c. Their feet and legs not unfrequently become distorted from too long standing.
- (PETER HOLLAND Esquire.)—From the answer to Query 4, it will have appeared that diseases producing death are not frequent. Where a disposition to pulmonary complaints or to scrofula pre-exists, it has appeared to me that the children have this disposition increased; but I know of no diseases to which they are particularly subject. During the forty-two years of my attendance I recollect only one very serious accident. A poor girl was caught by the machinery, and her leg so much injured that I found it necessary to amputate it; she recovered, enjoyed good health afterwards, and worked many years at the mill: this occurred more than twenty years ago. Minor accidents occasionally but not frequently happen, from the fingers being caught in the wheels; I do not recollect any child being permanently crippled by this. I have never seen any distortion of the spine from the employment of the children; in the course of my long attendance there have been some cases in which a weakness in the ankle joints has appeared, but these have not been numerous; and when the tendency has appeared it has very generally been obviated by some change in the employment.

Query 8. *Have you met with any, and with how many, cases of suicide during a certain period among those who are engaged in factory labour?*

(Dr. JAMES BARDSLEY.)—I have not met with a single case.

(Dr. ALEXANDER.)—I have never met with a case of suicide in our factory population.

(Dr. MITCHELL.)—I have met with none.

(Mr. FAWDINGTON.)

(Mr. FAWDINGTON.)—I remember no case of suicide.

(Mr. WHATTON.)—None.

(Mr. MANN.)—I do not recollect a single case during the fifteen years I have practised here. I scarcely recollect a case of melancholy; and take them altogether they are (as far as regards their labour) as happy a race as I ever met with.

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(Dr. PHILLIPS.)—I never met with a single case of suicide amongst the factory people.

(Dr. CHARLES HENRY.)—During the five years of my connexion with the charities of this place I have never had occasion to witness or hear of a single case of suicide among factory operatives.

(Dr. SHAW.)—I have never met with a single instance of suicide amongst the factory classes during the five years I have been physician to the Salford Dispensary.

(Dr. CARBUTT.)—I think not any.

(Dr. HULME.)—None.

(Dr. LYON.)—No.

(Mr. ROBERTON.)—I do not know that I have ever met with an instance of suicide in a cotton manufacturer. I believe the crime is rare in this part of the kingdom.

(Dr. JARROLD.)—I have seen several cases of hypochondriasis and a few of insanity in the last ten years, but none of suicide.

(Mr. HARRISON.)—Never, either in the parish workhouse or at home.

(Mr. BROWN.)—I have witnessed numerous instances of self-destruction, but never saw a desire to commit it even in a single individual in this class of people.

(Mr. MOORE.)—Yes, but the number is not greater than of those otherwise employed.

(Dr. FORESTER.)—I have not met with any cases.

(Mr. FOX.)—I do not recollect any.

(Mr. HILL.)—None.

(Mr. EVANS.)—One case.

(PETER HOLLAND Esquire.)—Never with one.

Query 9. *Have you remarked that the factory classes are more or less addicted to the use of spirits than other persons of similar means?*

(Dr. JAMES BARDSLEY.)—No.

(Dr. ALEXANDER.)—The degree of *comparative addiction* I cannot pretend to affirm; but of the great prevalence of spirituous indulgence amongst the factory classes there is, I think, little doubt.

(Dr. MITCHELL.)—I have not remarked any difference.

(Mr. FAWDINGTON.)—I have not observed that they are *more* addicted to intemperance than those engaged in other branches of manufacture.

(Mr. WHATTON.)—Certainly, I think they are more so; I think the gin-shops are the greatest curse of the country, and that access to the use of spirits ought to be greatly restricted.

(Mr. MANN.)—The use of ardent spirits is so common in this neighbourhood that I think it would be difficult to say where it most abounds; it is decidedly the arch enemy of our working classes: take from them this curse and the means of obtaining it, viz. pawnbrokers shops, and their moral and physical condition will be improved by nine tenths.

(Dr. PHILLIPS.)—I have not, nor do I believe that the factory classes are more addicted to the use of spirits than others of the labouring poor.

(Dr. CHARLES HENRY.)—The factory classes constitute so large an element of our population, and have the command of so much larger pecuniary means than any other *numerous* class of artisans here, that I feel unable to institute the comparison. There is no doubt much abuse of spirituous liquors among them and mechanics and other well-paid workmen.

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(Dr. SHAW.)—I have no positive data to go upon, but my impression is, that the factory operatives are not more addicted to the use of ardent spirits than other persons in a similar station of life, though unfortunately the vice of drunkenness prevails to a serious extent amongst the working classes generally. Spirits are too often taken, in the first instance, as a cheap substitute for food. The hard-working artizan feels his exhausted frame renovated by the pernicious drug commonly sold as gin or other spirit, a confirmed habit of drinking succeeds, and his constitution becomes rapidly undermined.

(Dr. CARBUTT.)—I have not.

(Dr. HULME.)—Not more than other working people.

(Dr. LYON.)—No.

(Mr. ROBERTON.)—Owing to the regularity with which they are obliged to attend on their occupations daily, factory people spend less time in tippling than some of the other trades; but numbers of them drink to excess on Saturday evenings and during Sundays, and it is common for the overlookers to remark the dozing, stupified look which many of the male hands present on the morning of Monday. Besides, I am informed that it is not uncommon for the more depraved to carry with them into the factory spirits and other means of intoxication.

(Dr. JARROLD.)—They are almost all drinkers of spirits; exhaustion and the want of recreation dictate their use: I believe there are fewer exceptions than in other classes.

(Mr. HARRISON.)—Almost all the operatives of Manchester, and particularly their wives, are addicted to dram-drinking; but do not think that the factory classes have the opportunity of spending their time in public-houses as many other trades have.

(Mr. BROWN.)—Ale principally and likewise ardent spirits are in but too much use on Saturday evenings, Sundays, and on particular holidays; but perhaps not in greater excess than among other operatives who obtain good wages.

(Mr. MOORE.)—Not more addicted than other persons of the working classes.

(Dr. FORESTER.)—I have no reason to think so.

(Mr. FOX.)—All working classes are addicted to spirit-drinking in large towns, the factory hands not more so than others in this town.

(Dr. BAKER.)—Only so far as the inhabitants of all large towns are usually more given to intemperance than those who reside in villages.

(Mr. HILL.)—Not at all.

(Mr. EVANS.)—No.

(Dr. BENT.)—I have not.

(PETER HOLLAND Esquire.)—My belief is, that they are less addicted to the use of spirits than other persons of similar means. I form this opinion from the complexion and, general appearance of the persons employed by Messrs. Greg when I meet them which I may often do, passing between the village and the factory.

Query 10. *Is the use of opium, as an article of luxury, frequent amongst the factory operatives?*

(Dr. JAMES BARDSLEY.)—Not to my knowledge.

(Dr. ALEXANDER.)—*Frequent* I should scarcely think it to be; but I am informed by a respectable chemist of this town that some of the older operatives are in the regular habit of taking opium in its solid form.

(Dr. MITCHELL.)—I never heard that it was.

(Mr. FAWDINGTON.)—I have never heard of opium as used in the way of luxury by the factory operatives in this part of the country.

(Mr. WHATTON.)—I cannot state that it is.

(Mr. MANN.)—I believe not; having practised among the operatives employed in factories very extensively, I should have been aware of the fact had it existed; it is, however, the means of destroying the lives of some hundreds of infants in this district annually, and the constitutions of some thousands of others.

(Dr. PHILLIPS.)—I am not aware that opium is used as an “*article of luxury*” amongst the factory operatives. It certainly is used, and I suspect extensively, amongst the elder females; but I never knew it used otherwise than for the purpose of procuring sleep at night.

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(Dr. CHARLES HENRY.)—I am persuaded that opium is *not* used in this way to any extent; insulated examples have certainly fallen under my notice, but they have generally been persons who have suffered from some chronic pectoral affection, and have at first had recourse to opium as a *remedy*. I am not aware either that the individuals to whom I allude were employed in factories.

(Dr. SHAW.)—After a very careful inquiry I feel convinced that opium is unknown as an article of luxury amongst factory operatives. The only persons to whom opium is administered, which it is to a great extent under the form of syrup, are infants, many of whom annually fall victims to it. Mothers who work from home are obliged during the day to leave their infants under the care of some neighbour who, not uncommonly takes charge of three or four. The infant becomes irritable, laudanum is administered to induce sleep, the child awakes fretful and feverish, more laudanum is administered, the consequences of which manifest themselves in no long period.

(Dr. CARBUTT.)—I have a strong belief that it is not so.

(Dr. HULME.)—I have never known it.

(Dr. LYON.)—I am not aware that it is.

(Mr. ROBERTON.)—Opium in any form is rarely (if ever) used by the operatives as an article of luxury. I have been at pains to ascertain this fact.

(Dr. JARROLD.)—I believe not.

(Mr. HARRISON.)—I understand that the spinners in some of the mills in Manchester take it as a luxury, but do not believe it to be frequent, as I have never met with a case during my practice.

(Mr. BROWN.)—I do not think that it is at all used, except medicinally, and then chiefly administered to children in the form of “Dalby's Carminative,” or “Johnson's Infants Preservative.”

(Mr. MOORE.)—No; the use of it scarcely known.

(Dr. FORESTER.)—I do not know that it is more used by the factory people than by others.

(Mr. FOX.)—Not very frequent in this town; most of the opium-eaters I am acquainted with are not factory hands, but indolent persons.

(Dr. BAKER.)—I have inquired and believe those who use opium are few and unconnected with factories; but many mothers employed in mills are in the habit of giving opiates, such as Godfrey's Cordial, Daffy's Elixir, or laudanum, to their infants, that they may sleep during the mothers absence; and I have traced permanent squinting to this cause.

(Mr. HILL.)—No.

(Mr. EVANS.)—No.

(Mr. CHARLES BROUGH.)—I have never met with a case amongst factory operatives.

(Dr. BENT.)—Never to my knowledge.

(PETER HOLLAND Esquire.)—I never heard of its being used.

Query 11. *Are the children of factory operatives inferior in stature to those of your other classes, and to those of the inhabitants of the rural districts in your neighbourhood?*

(Dr. BARDSLEY.)—As far as my own observation goes (although not extensive), I believe that the children of factory operatives are inferior in stature to those of the inhabitants of rural districts, but not to those of the other classes in our town.

(Dr. JAMES BARDSLEY.)—I do not feel capable of giving a *decided* answer to this question; but I have not noticed that factory children are inferior in stature to those of the other classes in town; but I do think that they are less in size than those brought up entirely in the country.

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- (Dr. ALEXANDER.)—That the factory operative is inferior in height and weight to the rustic is certain, and in my opinion to those in other classes generally.
- (Mr. FAWDINGTON.)—If I am called upon to make a broad distinction between the children of factory operatives and those of the agricultural labourer, I am inclined to believe that the latter, generally speaking, attain a fuller growth and greater constitutional vigour than the former; but if the question refer to other branches of manufacture in Manchester and the neighbouring towns, I am unable satisfactorily to form a distinction.
- (Mr. WHATTON.)—I do not think they are much different from the other inhabitants of the district.
- (Mr. MANN.)—They are not so at birth; their subsequent sallow appearance and spare habits I attribute more to the causes mentioned in Query 17. than to the labour in factories; no such appearances existing in well-regulated families, although employed in factories.
- (Dr. PHILLIPS.)—I have not observed that the children of factory operatives are inferior in stature to the children of others of the labouring poor *living in the same district*. It is not to be imagined that children born and brought up in a town like Manchester, whether employed in factories or not, will exhibit a vigour of constitution equal to that of children born and brought up in rural districts.
- (Dr. CHARLES HENRY.)—They certainly are inferior to the inhabitants of the country in colour and the external symbols of vigorous health and personal strength.
- (Dr. SHAW.)—The children of factory operatives are not inferior in stature to those of the other working classes in Manchester; but my opinion is, that they are inferior in stature, in breadth, and in weight to the children in the agricultural districts of Lancashire. I have moreover observed that children employed in factories situate in the country, who have a more wholesome diet, are better lodged, and breathe a pure air, are not inferior in any respects to the surrounding population, but frequently exhibit a ruddy complexion.
- (Dr. CARBUTT.)—They are inferior in stature to children of our other classes; I think they may be inferior to those of the rural districts.
- (Dr. HULME.)—They are not.
- (Dr. LYON.)—The children in town are generally inferior in point of appearance and vigour to those in the country; if a comparison be made, for instance, between a set of children working in a cotton or silk mill in Manchester and a set in one of the woollen mills in Saddleworth, it will be much to the advantage of the latter.
- (Mr. ROBERTON.)—To this query I am unable to furnish any reply.
- (Dr. JARROLD.)—The women certainly are so, the men are of an ordinary height or nearly so, but are thin and feeble, and unmanly in their appearance.
- (Mr. BOUTFLOWER.)—Many of them are so, and look spare and squalid.
- (Mr. HARRISON.)—I think that they are shorter and less stout than those of the agriculturists. Their complexion is seldom ruddy, but cadaverously inclined.
- (Mr. BROWN.)—I am not prepared to state that any perceptible difference exists. A striking difference is obvious in the physiognomy and physical development in those bred and educated in adjacent villages, whether occupied in agricultural labour or at the loom.
- (Mr. MOORE.)—Yes.
- (Dr. FORESTER.)—In general they are less robust, and not unfrequently of smaller stature.
- (Mr. FOX.)—They are not so robust as some other classes; some of them are checked in their growth.
- (Dr. BAKER.)—Decidedly they are; and their legs give way from long standing, the knees press inward, as do the ankles, causing these persons to become splay-footed.
- (Mr. HILL.)—Much the same.
- (Mr. EVANS.)—I think they are.

(Mr. CHARLES

(Mr. CHARLES BROUGH.)—There can be no doubt but that children employed in factories scarcely ever attain that size which other children do.

(Dr. BENT.)—I think they are, to those of the inhabitants of rural districts.

(PETER HOLLAND Esquire.)—The children apprenticed to Messrs. Greg have been usually from workhouses (often the Liverpool workhouse, or from Chelsea); and I should say of them generally that they are, when they are first brought, inferior in stature to the inhabitants of rural districts in this neighbourhood. I have not remarked that the children of factory operatives are inferior in stature; but few of these are apprenticed to Messrs. Greg, and my remarks and experience apply particularly to the apprentices.

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Query 12. *Has the factory life any tendency to check the complete growth in those of either sex who have reached the age of puberty?*

(Dr. ALEXANDER.)—The General Dispensary for Children (to which I am attached) only taking cognizance of the ailments of the young up to the period of puberty, I do not presume to answer the question.

(Mr. FAWDINGTON.)—My experience does not enable me to reply confidently to this query; other causes, moral and physical, are apt at the period of life in question to interfere with health, and hence to interrupt the full development of the system.

(Mr. WHATTON.)—Perhaps so; I cannot state positively that it has.

(Mr. MANN.)—If employed in a very high temperature it certainly will have that effect, especially if sent at too early an age; a case of decrepitude arising from factory labour I have never met with.

(Dr. PHILLIPS.)—I believe not.

(Dr. CHARLES HENRY.)—I have no *practical* knowledge that it has.

(Dr. SHAW.)—So many causes operate in a large and crowded town to check the complete growth of the young in both sexes, that it would be difficult to determine the precise influence which factory labour exercises in bringing about this result.

(Dr. CARBUTT.)—It has not.

(Dr. HULME.)—I think not.

(Dr. LYON.)—The nature of the greater part of the work is not calculated to promote the full development of the muscular system.

(Mr. ROBERTON.)—I have taken no admeasurements of the stature of persons working in factories, but my impression from cursory observation is, that the children of both sexes so employed under the age of puberty are inferior in stature, and I should think in weight also, to children in the rural districts. Females grow very little in height under any circumstances after the age of puberty; but I cannot say with confidence whether or not the factory life affects the development of the frame after this period in either sex.

(Dr. JARROLD.)—In the female.

(Mr. HARRISON.)—I believe that it has, particularly where children at a very early age have been sent to the mills.

(Mr. BROWN.)—As examiner to the recruiting service in this town, I have had abundant opportunities for observation; numbers of factory operatives from the age of eighteen to twenty-four have presented themselves for examination; but I cannot undertake to say that I have been able to discover any perceptible difference of stature legitimately attributable to the previous employment in which the recruit had been engaged.

(Mr. MOORE.)—Yes.

(Dr. FORESTER.)—I think it has that tendency.

(Mr. FOX.)—Slightly so.

(Dr. BAKER.)—It has; they are premature as to puberty, and their bodies cease to be developed farther.

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(Mr. HILL.)—I think not.

(Mr. EVANS.)—I believe it has.

(Mr. CHARLES BOROUGH.)—I think it has, as I have frequently noticed those who have worked in factories are for the most part of small stature.

(Dr. BENT.)—I believe it has.

(PETER HOLLAND Esquire.)—I am not aware that it has had such tendency in the factory I have been in the habit of visiting. I should certainly say of the children generally that they are not tall; but, as I have before observed, they are, very many of them, of small stature when they first come to the factory.

Query 13. *Have you met with many instances in which adults employed in factories have been compelled to quit their employment through diseases apparently induced by their occupations?*

(Dr. BARDSLEY.)—I have met with a considerable number of instances in which adults have been compelled to quit their employment through diseases apparently induced by their occupation in factories; but for the most part these invalids have been constitutionally predisposed to disorders of the chest.

(Dr. JAMES BARDSLEY.)—Those adult spinners who have been obliged to quit their employment have generally done so, according to my experience, from impaired vision.

Dr. ALEXANDER.)—I have not.

(Dr. MITCHELL.)—I have not.

(Mr. FAWDINGTON.)—Probably such examples have occurred to me, but as my mind had not been specially directed to the inquiry they may have escaped my memory.

(Mr. WHATTON.)—No.

(Mr. MANN.)—No, though I have met with persons who attributed their illness to this cause; but as such diseases (mostly of an asthmatic character) are common to mankind, I have reason to believe they were mistaken.

(Dr. PHILLIPS.)—The only cases of this kind I have met with were those of three spinners who died of phthisis, modified, as it appeared to me, by the immediate exciting cause of the disease; which cause I conceived to consist in the alternations of temperature to which the patients had been exposed during the winter on entering and quitting the factories.

(Dr. CHARLES HENRY.)—I have met with some persons, particularly among those employed in the carding-rooms, whom I have strongly recommended to change their mode of employment, or at all events to obtain work in some other department of the factory. These have been cases of bronchitis of a slow and insidious character, in which I have apprehended the actual or probable development of tubercles.

(Dr. SHAW.)—I have met with many instances in which adult factory operatives have been compelled to quit their employment from pulmonary complaints, induced, as I believe, from the irritation caused in the lungs by the inhalation of the fine particles of cotton floating in the atmosphere of certain rooms in the factory.

(Dr. CARBUTT.)—Not one.

(Dr. HULME.)—I have met with several cases of people working in carding-rooms where an inferior cotton was spun, whom I have recommended to remove to another room in the factory, as I considered the dust was injurious to their lungs.

(Dr. LYON.)—Some cases of chronic pulmonary affection, which were always aggravated by a return to the factory, so that it became necessary to seek some other employment.

(Mr. ROBERTON.)—In those who worked in cotton factories I have sometimes met with cases of bronchitis, which I supposed were produced by the dust and filaments diffused in the atmosphere of the mill; but as the same disease occurs under a great variety of circumstances, my conjecture might be erroneous.

(Dr. JARROLD.)—I have seen many consumptive persons who have left their work, and none are competent as spinners after forty-five.

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(Mr. BOUTFLOWER.)—The diseases I have alluded to must occasionally compel them to change their employments.

(Mr. HARRISON.)—A few cases, where patients have been suffering from a disease much the same in character as the Sheffield asthma, induced by the breathing air loaded with the very fine particles of cotton continually floating through these establishments.

(Mr. BROWN.)—I have but rarely known instances of persons employed in factories obliged to abandon this employment, and then from intemperance, or such as possessed hereditarily a tendency to asthma or to chronic bronchial inflammation and its consequences, which rendered a change in their pursuits necessary.

(Mr. MOORE.)—No cases have fallen under my observation.

(Dr. FORESTER.)—At various times I have advised children (females especially) to quit the cotton and silk mills on account of their health.

(Mr. FOX.)—Not many; not more than other classes of workpeople.

(Dr. BAKER.)—Several (who at least ought to have quitted), from the supervening of the diseases alluded to in my reply to Query 7.

(Mr. HILL.)—No.

(Mr. EVANS.)—A few instances.

(Mr. CHARLES BOROUGH.)—I have met with several who have died consumptive.

(Dr. BENT.)—I am not aware that more adults employed in factories have been obliged to quit their employment on account of disease arising out of that employment than other artizans.

(PETER HOLLAND Esquire.)—I have not attended the adults.

Query 14. *Have you met with many instances in which adults employed in factories have been compelled to quit their employment through accidents occurring in the course of their labour?*

(Dr. JAMES BARDSLEY.)—Very few comparatively with children.

(Dr. ALEXANDER.)—No.

(Dr. MITCHELL.)—I have not.

(Mr. FAWDINGTON.)—No doubt such cases do occur, but, at present, I recollect no instance.

(Mr. WHATTON.)—No.

(Mr. MANN.)—No; severe injuries are generally taken to the infirmary; the proportion, I believe, will not amount to more than one in five thousand per annum.

(Dr. PHILLIPS.)—Cases of this kind of course occur occasionally.

(Dr. CHARLES HENRY.)—I have not; such cases would become the objects of treatment in the *surgical* wards of our hospital, and do not therefore fall within my province.

(Dr. SHAW.)—I have not met with any instances in which adults employed in factories have been compelled to quit their employment through accidents occurring in the course of their labour; but such instances, when they occur, are more likely to fall under the notice of the surgeon than of the physician.

(Dr. CARBUTT.)—I have a few; as, for instance, where a hand has been lost.

(Dr. HULME.)—Cases of this kind no doubt sometimes occur, but as they would come under the care of a surgeon, they have not attracted my attention.

(Mr. ROBERTON.)—I have not met with cases of such accidents in my practice, and I know that they do not often occur in the factories of this town.

(Mr. HARRISON.)—This question will be referred to the infirmary surgeon, he being the most proper person to answer it.

(Mr. BROWN.)—I do not remember a single instance.

(Mr. MOORE.)—Not many.

(Dr. FORESTER.)—I do not recollect any instances.

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(Mr. Fox.)

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(Mr. Fox.)—Occasionally ; not often.

(Mr. HILL.)—A few.

(Mr. CHARLES BOROUGH.)—I have met with several.

(PETER HOLLAND Esquire.)—See answer to Query 13.

Query 15. *Are the factory operatives more or less attentive to cleanliness and ventilation in their dwellings than other persons of similar means ?*

(Dr. BARDSLEY.)—I consider them equally and generally speaking more attentive to cleanliness and ventilation in their dwellings than other persons whose labour is less productive, and fairly upon a par with those whose means are similar.

(Dr. JAMES BARDSLEY.)—Fully as attentive to cleanliness and ventilation in their dwellings as other persons of similar means.

(Dr. ALEXANDER.)—I fear they are less so.

(Dr. MITCHELL.)—They are equally as attentive.

(Mr. FAWDINGTON.)—I cannot confidently answer this query.

(Mr. WHATTON.)—I do not perceive any difference.

(Mr. MANN.)—Generally speaking, less attentive ; here is one of the great causes of their low physical condition.

(Dr. PHILLIPS.)—There is as much variety amongst the factory operatives in this respect as amongst other classes of the labouring population. Some of the factory families are as remarkable for their attention to the cleanliness and comfort of their houses as others are for their utter neglect of those particulars.

(Dr. CHARLES HENRY.)—There is decidedly more comfort and cleanliness among those who work in *factories* than among that class who work in their own *dwellings*, viz. hand-loom weavers, fustain cutters, &c. I regard the factory operatives, as a body, as decidedly superior in their command of the comforts of life, and even of luxuries, to any part of our population.

(Dr. SHAW.)—I should say that factory operatives were equally attentive to cleanliness and to ventilation in their dwellings as the other working classes of this great town. They are better paid, and can afford to live in a house or in the upper part of a house, and do not often inhabit the damp, unventilated, crowded cellars which are equally the curse and the disgrace of Manchester. To this source we may trace many of the evils, moral and physical, which affect the poorer classes ; and no lot can be conceived more miserable than that of the child who has to pass the little time allotted to it for rest in such an abode of filth and damp.

(Dr. CARBUTT.)—They are more attentive than other working persons, perhaps because their means are better.

(Dr. HULME.)—I believe much the same.

(Dr. LYON.)—The families of which both the older and younger members are employed in factories have appeared to me in general to constitute a class distinguished for their attention to cleanliness and comfort, though it should be stated that the comparison has been made principally with weavers and others of inferior means. Where the children of a family are alone employed, their habits will of course be influenced by those of their parents.

(Mr. ROBERTON.)—As cotton factory operatives have always, I believe, obtained the highest wages of any general branch of trade in this community, such as are moral have the means of obtaining the comforts of life, and are undoubtedly comfortable and cleanly ; but a large proportion of all engaged in the cotton manufacture are filthy in their persons, many performing no kind of ablutions during the working days of the week, so that by Saturday they are unsightly and disgusting. A large number reside in cellars, a kind of habitation productive of the worst effects on the feelings and habits of a family. Cellar residences, which amount to several thousands, are one of the curses of this town, constituting, in those who constructed and introduced them as human dwellings, a crime against mankind. Ventilation is out of the question in such a residence ; and the effluvia arising from the various sources which may be supposed to exist in a family, finding no sufficient escape, produce an atmosphere in many instances I have witnessed of the most repulsive description. Furniture of more than the value of a few shillings is seldom found there ; and those families which have

have once been content to live in a Manchester cellar are never likely afterwards to regain a proper sense of self-respect, or a due regard for the decency and ordinary comforts of civilized life.

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(Dr. JARROLD.)—Women bred in factories can have no domestic habits, and are consequently inattentive to cleanliness. They make wretched wives. The door is commonly open in all classes, but seldom the window.

(Mr. HARRISON.)—I have never remarked any peculiarity in their dwellings; the females are generally neat in their persons and clean.

(Mr. BROWN.)—I should say, generally, but indifferently attentive to such domestic comforts; many gratifying exceptions are however to be met with.

(Mr. MOORE.)—Much depends upon their own habits.

(Dr. FORESTER.)—I do not think that there is much difference in regard to cleanliness between the dwellings of factory operatives and those of other persons in a similar rank of life.

(Mr. FOX.)—I think there is no material difference.

(Dr. BAKER.)—I think not deficient in cleanliness, I should rather say that the labouring classes in Derby are cleanly.

(Mr. HILL.)—Much the same.

(Mr. EVANS.)—They are more attentive.

(Mr. CHARLES BOROUGH.)—Certainly not more attentive, and I should rather be inclined to say quite the reverse.

(Dr. BENT.)—They are not deficient in cleanliness.

(PETER HOLLAND Esquire.)—My attendance has been almost entirely confined to the apprentices, who are lodged in a large house, in which cleanliness and ventilation are particularly attended to.

Query 16. *Are the factory operatives in the habit of teaching their children the use of spirits?*

(Dr. JAMES BARDSLEY.)—I believe not.

(Dr. ALEXANDER.)—I never met with an instance of a parent inculcating such a practice, nor do I believe such a habit to exist.

(Dr. MITCHELL.)—No.

(Mr. FAWDINGTON.)—If my observations be correct, not more so than other artizans.

(Mr. WHATTON.)—I think so; as they frequently accompany the parents to the gin-shops they soon learn their habits. I believe, moreover, that the earnings of the children are frequently taken by the parents for the purpose of procuring gin for themselves, and the children thus suffer privation and neglect.

(Mr. MANN.)—They are not; it is however too frequently given in infancy as a remedy.

(Dr. PHILLIPS.)—If this question is meant to apply to the *general rule*, and not merely to individual cases, I have no hesitation in answering in the negative.

(Dr. CHARLES HENRY.)—I am persuaded that they are not.

(Dr. SHAW.)—I am not aware that factory operatives are more in the habit of teaching their children the use of spirits than the other operatives in this town. Such a practice does exist, and will increase whilst the dram-shop invites the hard-working artizan at the corner of each street.

(Dr. CARBUTT.)—I have a very strong belief that they are not in this habit.

(Dr. HULME.)—I do not know.

(Dr. LYON.)—This cannot fairly be affirmed of any of the working classes as a class.

(Mr. ROBERTON.)—I cannot say that factory people are more addicted to this practice than others, but that the evil is not unfrequent among the poor I have had many proofs.

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(Dr. JARROLD.)—Few children are ignorant of the taste of spirits; I do not know in what proportion to state the exceptions.

(Mr. HARRISON.)—Cannot say.

(Mr. BROWN.)—I fear numerous instances might be found; but I think that the practice of ale-drinking at retail beer-houses, acquired from the example of youthful delinquents, rather than parental instruction, is frightfully on the increase.

(Mr. MOORE.)—Not more than other classes.

(Dr. FORESTER.)—The use of spirits is unfortunately much more general than formerly amongst all classes of people.

(Mr. FOX.)—I think not in this town.

(Dr. BAKER.)—I believe not.

(Mr. HILL.)—No.

(Mr. EVANS.)—No.

(Mr. CHARLES BOROUGH.)—Not to my certain knowledge.

(Dr. BENT.)—I don't think they are.

(PETER HOLLAND Esquire.)—My belief is not, but I have no certain means of knowing.

Query 17. *What do you conceive ought to be the limit of factory labour for children from the age of nine to thirteen, and for the youth of both sexes from the age of thirteen to eighteen?*

(Dr. BARDSLEY.)—I cannot answer the first part of this query to my own satisfaction from want of sufficient data. In some factories, properly constructed, in healthy localities, and well regulated, a child from nine to thirteen in my opinion would suffer less from eleven hours labour than in other unhealthy situated and ill-regulated establishments where the hours of labour would not exceed ten; I am, however, inclined to believe that the limit of eleven hours for the youth of both sexes from the age of thirteen to eighteen, under the favourable circumstance of well-regulated factories, would not be prejudicial to health.

(Dr. ALEXANDER.)—I conceive that ten hours actual occupation in the duties of the factory is as much as a child from nine to thirteen years of age can bear with impunity; children from thirteen to eighteen may probably be engaged for eleven hours, but every hour's labour beyond that period is undertaken at the expence of the constitutional stamina, and must lead to consequences the most deplorable.

(Dr. MITCHELL.)—Children from the age of nine to thirteen of a weak or delicate habit may have difficulty in standing the regular hours of factory labour, but strong and healthy children seem to suffer no inconvenience.

(Mr. FAWDINGTON.)—For all ages included in this query I do not hesitate to offer the opinion, that ten hours should be the limit of *actual* exertion *daily*, considering the nature of the employment in factories; of course, the younger and more delicate the individual, the shorter should be the term of active employment.

(Mr. WHATTON.)—From nine to thirteen perhaps *ten hours*, from thirteen to eighteen perhaps twelve; though I have but little knowledge of these matters. These hours *include* meals.

Mr. MANN.)—I am of opinion that the present time (limited by law to sixty-nine hours) is too long for any of the persons here described; at the same time I am aware that much greater evils exist in the unwholesome diet, insufficient clothing and bedding, dirty apartments, and immoral habits, than what arises from factory labour. I conceive the time ought to be limited to sixty-three hours per week, and it would be advisable to take this time from the morning work.

(Dr. PHILLIPS.)—As I have not been able to discover that the factory children have sustained any injury under the regulations that have existed hitherto, and seeing also the very advanced age to which persons have lived that have worked thirty, forty, and in one case nearly sixty years in cotton factories, I should be disposed to discountenance any further restrictions in the factory regulations.

(Dr. CHARLES HENRY.)—I question very much the propriety of allowing children of the age of nine years or under eleven to work *at all* in factories, and I am certainly disposed to believe that more than twelve hours (including the intervals of meals) or
ten

ten hours actual labour, is inconsistent with the physical and moral health of our youthful population.

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(Dr. SHAW.)—I consider that children under twelve years of age ought not to be employed in factories; under that age the osseous system is not sufficiently perfected to enable them to bear without injury any labour that is not easy and of short duration; moreover, air and exercise are especially required at that period for the due assimilation of food and for the full development of the frame. Between the twelfth and eighteenth year it is desirable that factory labour should be limited to eleven hours; but if this limitation is to be attended by a decrease of pecuniary means, I would rather the time of labour were extended to twelve hours than see the factory operatives in the miserable condition of some of our poorer artizans. The object of shortening the duration of labour is to afford opportunities for the due growth of the body and the proper cultivation of the mind; these opportunities, however, would be in vain offered if the wages were so reduced as to deprive the youth of both sexes of good nourishment and the means of procuring instruction.

(Dr. CARBUTT.)—I cannot say; but perhaps ten hours for the first class and twelve for the second ought to be the limit, although I must confess that I have never seen any harm to arise from the first class working twelve hours. The labour is so light it is more like play.

(Dr. HULME.)—I think twelve hours, with the usual intervals for food, for healthy children under the age of puberty.

(Dr. LYON.)—*If it were a question of choice*, I should think that children from nine to twelve years of age might perform with advantage the light labour of the factory for the space of eight hours a day; twelve hours a day is as long a time as it can be desirable for persons of any age to be actively employed.

(Mr. ROBERTON.)—Children, I am inclined to think, ought not to be employed in factories earlier than their tenth year, otherwise they are not likely to become, under any circumstances whatever, educated and intelligent. The adults and the children ought for many reasons to work the same length of time daily; the adults have many duties to perform for themselves and families at home which the children have not; and, besides, the children's work is lighter than that of the adults in proportion to their smaller powers. I am satisfied that *the greatest temporal evil* which could happen to this community would be *the want of employment*; as the next greatest evil, however, I should consider the permanent establishment of such hours of daily labour as must, in the nature of things, depress the energies of the operatives, and render their moral and intellectual improvement all but impossible. Hence, as soon as on economic grounds the present hours of factory labour can be safely abridged, I am of opinion, considering there are so few holidays, that ten hours and a half of *actual* labour daily (the weekly market-day excepted) would be long enough.

(Dr. JARROLD.)—Certainly not more than ten hours in either case; children exist when worked longer, but factory employment is so monotonous that the mind gets no relief. Only to work and to sleep, as is the case now, is destructive of all moral principle.

(Mr. BOUTFLOWER.)—I am unable to state; standing so many hours seems to me mainly injurious, and has partly a mechanical effect in producing disease, although the disease is generally preceded and accompanied by general weakness and a deranged digestion.

(Mr. MOORE.)—From nine to thirteen years of age eight hours labour, from thirteen to eighteen years ten hours labour.

(Dr. FORESTER.)—From nine to thirteen years no child ought to be worked more than ten hours, breakfast and dinner included; from thirteen to eighteen twelve hours, breakfast and dinner included.

(Mr. FOX.)—From nine to thirteen, ten hours; from thirteen to eighteen, twelve hours; the time for meals being included in these hours.

(Dr. BAKER.)—From nine to thirteen, ten hours at the most, including meal-time; from thirteen to eighteen, twelve hours exclusive of meal-time. Protection against the employment of children under nine is required on account of the avarice of the parents as well as for other reasons. The hours of work should change with the seasons, so as to avoid the use of gas-lighting, which of course causes the rooms to be hotter and the atmosphere more impure.

(Mr. HILL.)—From nine to thirteen years, from eight to nine hours; from thirteen to eighteen, from ten to eleven hours.

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- (MR. EVANS.)—I think that eight hours ought to be the extreme limit for children from nine to thirteen, and ten hours for youth of both sexes from thirteen to eighteen.
- (MR. CHARLES BROUGH.)—I am of opinion that ten hours a day from the age of nine to thirteen, and twelve hours from thirteen and upwards, ought to be the utmost limit.
- (DR. BENT.)—I think no child between nine and thirteen ought to be allowed to labour more than one third of its time, that is eight hours; from thirteen to eighteen perhaps ten.
- (PETER HOLLAND Esquire.)—There have been instances of children being apprenticed to Messrs. Greg at nine, not however many; from ten to twelve is the usual age, and the ninety apprenticed children are varying from ten to eighteen or nineteen years of age. The hours these are employed at the factory are, as I believe, sixty-nine hours per week, or the same which the Act allows. By the answer to Query 4. it would appear that this has not occasioned any extraordinary mortality; and I may further add, that not only are mortal diseases not frequent, but the health of the children is generally good. It is however right to add, that the children are well fed, well clothed, and comfortably lodged; how far under different and less favourable circumstances there might be a different result I have not the means of knowing from any experience. It is very probable that if the factory labour of children from nine to thirteen was reduced an hour each day, or from sixty-nine to sixty-three hours, there might be some advantage to them from such reduction, though I have not had occasion to remark that the children from eleven to thirteen are not as well able to bear the labour as those from thirteen to eighteen.

Query 18. *Have the goodness to state which are the most unhealthy branches of factory labour in the order of their insalubrity?*

- (DR. ALEXANDER.)—I am quite unable to answer this query, not having facts whereupon to form an opinion.
- (DR. MITCHELL.)—The first process used in preparing the cotton, such as the batting and carding, is the most unhealthy.
- (MR. FAWDINGTON.)—From a comparison of the statements made by those immediately connected with factory labour, I should say, 1st, cotton batting; 2d, employment in the blowing-rooms; and next in order, some departments of the carding-rooms attached to factories for coarse spinning.
- (MR. WHATTON.)—Carding, batting, scavenging, &c.
- (MR. MANN.)—Fine spinners most unwholesome, coarse spinners, silk-mills.
- (DR. PHILLIPS.)—It has been supposed by some that the card-room is the most unhealthy department of the cotton-mill: while I was at the Ancoat's Dispensary I did not observe that I had more patients from the card-room than from other rooms of the factory; I mean, of course, in proportion to the numbers.
- (DR. CHARLES HENRY.)—The room in which the operation of carding is performed is the most insalubrious; but this injurious influence is confined to those factories where the low or coarse numbers are spun, and when the dust and floating filaments of cotton are not drawn away by means of a fan and connected pipes.
- (DR. SHAW.)—I am not acquainted with all the branches of factory labour, but the one which presents itself to my mind as most unhealthy is that wherein the cotton is first prepared and freed from its impurities. In this process a quantity of dust and flocculi of cotton are disengaged, which prove injurious to the organs of respiration; and I believe that many of the pulmonary complaints which present themselves at our public charities have their origin from this source.
- (DR. CARBUTT.)—The card-room is the most unhealthy; all the others are equally healthy, and as perfectly so as is possible for persons not working in the fields.
- (DR. HULME.)—I do not think any room in a factory that is well regulated can be called unhealthy, except the card-room, where low numbers are spun.
- (DR. LYON.)—In cotton-mills the card-room, on account of the quantity of dust, and some kinds of spinning on account of the very exhausting labour required; in calico-printing works I think some departments of labour may be found more injurious to health.
- (MR. ROBERTON.)—I am not able to answer this query except in regard to one branch, that of scavenging. The scavengers are children whose duty it is to keep the spaces under

under the wheels clean, and thus are exposed to breathing a more polluted atmosphere than the other operatives.

(Dr. JARROLD.)—The card-room.

(Mr. HARRISON.)—I have always understood that the process of carding is the most unhealthy.

(Mr. BROWN.)—The carding and beating or scutching processes are usually considered in cotton factories by much the worst, but in this town and neighbourhood the use of machinery obviates in a great degree its insalubrity. In flax-mills hacking is deemed the most injurious to health both by the employers and the employed.

(Mr. MOORE.)—This must entirely depend upon the improvements in the factories.

(Dr. FORESTER.)—The manufactories of white and red lead are the most noxious of any in this place, but few children I believe are employed in them. The cotton-mills, on account of the dust and particles of cotton floating in their atmospheres, are, *cæteris paribus*, more unhealthy than silk-mills; a tape-mill, at present discontinued, appeared to have a very injurious effect on the health of the people engaged in it. I have not yet had a sufficient opportunity of forming an opinion with respect to the lace works, which are of more recent establishment.

(Mr. FOX.)—Of those which I witness, lead considerably so; cotton rather unhealthy.

(Mr. HILL.)—Not much difference, except where most dusty.

(Mr. CHARLES BROUGH.)—I consider the spinning of very fine cotton to be the *most* unhealthy branch of factory labour, in consequence of the immense dust which it produces; and from the high state of temperature at which the rooms are kept, silk I imagine to be the next unhealthy branch, and then lace.

(Dr. BENT.)—The unhealthiness of factory labour in this town arises chiefly, I conceive, from over-fatigue, confinement in close apartments, and too long standing, and not from any thing insalubrious in the employment itself.

(PETER HOLLAND Esquire.)—Where there is any disposition to pulmonary complaints, the carding-rooms I should consider the most unhealthy. I am unable to state the order of insalubrity in the other branches of factory labour.

Query 19. *According to your experience, do any peculiar evils result to children from the high temperature at which some of the rooms in factories are maintained?*

(Dr. ALEXANDER.)—I cannot say that I have seen children labouring under direct evils induced by the cause mentioned; perhaps its chief effect is that of favouring female precocity, an occurrence often observed in our manufacturing districts.

(Mr. FAWDINGTON.)—As it is difficult to conceive the amount of agency belonging to any individual circumstance capable of generating disease in cases where *various other* circumstances might produce it, it would be almost impossible to determine how far the alleged evil in question *alone* tends to affect the health. The observations of those experienced in such matters would lead me to conclude that there is neither greater mortality nor a large sharer of ill-health existing among the operatives engaged in high temperatures than those employed in other departments in which the temperature is less exalted.

(Mr. WHATTON.)—I am not aware that *high* temperatures are usual in factories.

(Mr. MANN.)—I believe it renders them more liable to inflammatory complaints; it also stunts their growth.

(Dr. PHILLIPS.)—I have not hitherto been able to satisfy *myself* on this point.

(Dr. CHARLES HENRY.)—I am not aware of any evils from the temperatures now maintained, excepting perhaps a greater liability to catarrhal affections.

(Dr. SHAW.)—I am not prepared to say what peculiar evils result to children from the high temperature at which certain rooms in some factories are maintained. So many agents operate upon the body at the same time that it must be difficult to assign to each its proper individual share in producing the bad consequences complained of in the factory system. I should however imagine, that to this source (high temperature), along with want of exercise and pure air, may be traced the pallor uniformly observable in factory operatives.

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(Dr. CARBUTT.)—According to my experience, and I have had a great deal for nearly twenty years, the temperature is never so high as to be injurious. At any rate, I have never observed any peculiar evils resulting to either children or adults from the circumstance; it is *never* alluded to by the infirm patients as the cause of their maladies.

(Dr. HULME.)—I think not.

(Dr. LYON.)—They have a more sallow complexion in general than if they wrought in the open air.

(Mr. ROBERTON.)—I am unable to determine with any thing like certainty the evils which arise from this cause. Its manifest effects on the body are, increase of the sensible perspiration, and thence diminution of the natural vascularity of the skin, producing that habitual pale-facedness which characterizes factory children. It also, by preventing the deposition of fat under the skin (or rather its deposition in the ordinary quantity), renders the children thinner in person, and possessed in a less degree than those employed in the open air of that plumpness and rounded outline which are natural in youth to both sexes.

(Dr. JARROLD.)—Those that work in the hottest rooms are the most feeble, but in no temperature is the form of body or energy of mind proper to the country maintained.

(Mr. HARRISON.)—A child working in an artificial temperature, whether in cotton factories or other manufactories, must have its health more or less injured in consequence of the increased circulation and sudden change of temperature which must be experienced at certain seasons of the year.

(Mr. BROWN.)—Would the operatives but adopt the common-sense precaution in leaving the high temperature usually maintained in factories, but little evil would, I am persuaded, result. Passing as they constantly do from such an elevated temperature into one of such an opposite kind, in all weathers and in every season of the year, without any protecting apparel, and to the improvident conduct of the parents in not feeding the children better, may we attribute the origin of rheumatic pains of the joints, glandular enlargements, and disease of the pulmonary apparatus.

(Mr. MOORE.)—Not many have come under my observation.

(Dr. FORESTER.)—Where the temperature has been too high and the ventilation imperfect the children have looked pale and sickly.

(Mr. FOX.)—In this town considerable attention is paid to the temperature of the rooms of the factories, therefore I do not see much injury produced from that source. If it were otherwise much debility would arise, as well as many inflammatory affections, especially of the chest.

(Dr. BAKER.)—My reply to No. 7. may be taken as an answer to this, only adding, that the sudden passing from a very hot room into the open air, at all seasons and in all states of the weather, is an obvious source of danger.

(Mr. HILL.)—Sometimes producing headach and weariness.

(Mr. CHARLES BROUGH.)—The great heat of some of the rooms in which children work has a tendency to produce chronic bronchitis, which frequently proves fatal to them.

(Dr. BENT.)—See answer to Query 18.

(PETER HOLLAND Esquire.)—At Messrs. Greg's factory the temperature of the rooms is never very high, very rarely, as I believe, exceeding sixty-five, though I have seen the thermometer in one of the rooms at seventy-five; this however is unusual: I have not known any peculiar evils result to the children from this temperature.

Query 20. *According to your experience, do any peculiar evils result to children from night-work?*

(Dr. BARDSLEY.)—From my own experience I can assert that children especially (and likewise adults) are more exposed to disease than those employed in day-work. When the typhus fever raged in Manchester in 1795-6 my infirm reports demonstrated the greater liability to infection among night-working children than day-workers. I consider night-working injurious from the following special causes:—1st, the *ill-ventilated* state of the factories where the night-workers immediately succeed the day-workers; 2d, the transition from a heated temperature (especially in the cold months) to the external air when the human frame is debilitated from the want of a due proportion of refreshing sleep, as is almost always the case with children, who
do

do not sleep comfortably in the day when they work all night; 3d, night-workers for the most part lie down on the same unmade and disordered bed from which the family had just risen, and through noise and distraction, and the propensity to play, or idleness, children rob themselves of a due portion of sound sleep.

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(Dr. JAMES BARDSLEY.)—I consider night-labour injurious to the growth and health of young children, and especially pernicious to the lungs from alternations of heat and cold.

(Dr. ALEXANDER.)—Night-labour in Manchester being any thing but general, my positive experience as to its effects has been very limited; they are however too easily presumed, and cannot, I think, be regarded but as highly pernicious equally to the mind and body of the operative.

(Dr. MITCHELL.)—Yes.

(Mr. FAWDINGTON.)—Were I to depend upon *à priori* reasoning, I should not hesitate to reply that night-work would be attended with decided evils; but, from observation, I am not *entitled* to answer the question.

(Mr. WHATTON.)—I have never examined any children who have performed night-work, or even seen them.

(Mr. MANN.)—I have attended young females who attributed their illness to this cause, and I believe it to have been so; its evil tendency is so well known in this neighbourhood, it cannot be too strongly deprecated.

(Dr. PHILLIPS.)—I cannot speak from my own experience on this point.

(Dr. CHARLES HENRY.)—I am satisfied that night-work is most pernicious to the health and well-being of children.

(Dr. SHAW.)—I have pleasure in stating, that I have had few opportunities of observing the effects of night-work upon children employed in the factories of Manchester; I have no doubt, however, that it must prove far more injurious to the constitution than an equal amount of work executed during the day. In conclusion, Gentlemen, I beg to state, that I fear the evils which result from the factory system will not be removed by the mere reduction of the hours of labour, unless this can be accomplished without reducing the wages of the operatives. Above all, it is necessary for you to look to the state of the manufacturing towns, to the number of small unpaved streets, to those abodes of misery the dirty damp cellars, and to the number of dram-shops, which are fast tending to demoralize the manufacturing population.

(Dr. CARBUTT.)—I have a very strong feeling against night-work for many reasons, and I think it ought to be stopped; but I have never observed any peculiar evils resulting to children from the practice, probably because it is not a very frequent practice in this town and neighbourhood. I do not remember more than half a dozen instances of children working at night and sleeping by day coming under my care.

(Dr. HULME.)—I have not much experience of night-work, but I have no hesitation in asserting that to work children during that period nature intended for repose must be highly injurious.

(Dr. LYON.)—I have no *exact* experience of the evils of night-work, but am certain that neither children nor adults can obtain the same quiet and refreshing sleep by day as by night. Many young women prefer working by night on account of the greater command of time it gives them for enjoyment of the day.

(Mr. ROBERTON.)—This query my experience does not enable me to answer.

(Dr. JARROLD.)—Where it is practised the children appear squalid and miserable.

1st.—I beg to add, that in 1819 I examined most of the Sunday-schools, and found that the number of fatherless children of deceased spinners greatly exceeded the proportion of children so circumstanced in any other class. 2d.—As an evidence of the distaste which has ever been felt to the working in factories, in the last war scarcely a youth of the military age could be found in some entire streets, and the number attested as recruits for the army exceeded in the whole space of the war the number of males born in the town in the same time.

(Mr. HARRISON.)—I have had no experience upon this point, but from inquiries among factory overlookers I find a decided objection to it; but I think that there cannot be a question of doubt respecting its injurious tendency.

(Mr. BROWN.)—Of the good or evil resulting from night-work I have had no experience, the owners of factories in this neighbourhood working their machinery in the day-time only.

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(Mr. MOORE.)—Night-employment is decidedly objectionable.

(Dr. FORESTER.)—I cannot speak to this point from actual experience, but on general principles, and a consideration of the laws which govern the animal economy, I should think night-work injurious, to young persons especially.

(Mr. FOX.)—I have not had an opportunity of making observations upon this point, but I consider it to be injurious, particularly as rest cannot be procured in the day-time so good as at night.

(Dr. BAKER.)—It is not much practised here, and I am therefore unable to speak of its *peculiar* physical effects; but the necessity for many lights in the rooms is a very great evil, to which I have alluded in my answers to Nos. 17. & 19. The moral danger of night-work is sufficiently obvious.

(Mr. HILL.)—I think a little more delicate.

(Mr. CHARLES BOROUGH.)—The evils arising from night-work are very similar to those produced by heated rooms.

(Dr. BENT.)—Children who work at night suffer from insufficient rest, as in the small houses which they occupy noises constantly occur in the day which prevent their sleeping soundly, and their parents often call upon them to nurse younger children, and to do other things, when they ought to be in bed.

(PETER HOLLAND Esquire.)—Messrs. Greg's factory is not worked in the night, and I have no experience elsewhere.

TABULAR EXAMINATIONS of the HEALTH of FACTORIES.

Tabular
Examinations.

Medical Examination of the Factory belonging to Messrs. MARK BOOTH,
(Silk Throwster), at Derby, on 10th June 1833.

Temperature — Highest, 80.
Ventilation — Indifferent.
Cleanliness — Indifferent.
Work — Begins at a quarter past six o'clock, and ends at seven o'clock.
Relaxation for meals — One hour and a quarter for dinner, twenty minutes for breakfast and tea.
Hot water afforded gratuitously or not — Not.
Holidays in the year — Two days at Christmas, Shrove Tuesday half a day, and half a day on Ash Wednesday, two days at Easter, two days and a half at Whitsuntide, a day at the races.
Medical assistance — None provided.
Total number of persons employed of all ages — About 118.
Total number of persons employed below 18 years of age — About 43.
General appearance and situation — Old.

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	10	Good.	14	12	Good.
2	11	Good.	15	14	Middling.
3	13	Good.	16	13	Good.
4	12	Good.	17	15	Good.
5	9	Middling.	18	15	Good.
6	12	Middling.	19	12	Good.
7	10	Good.	20	16	Middling. Weak in knees and ankles.
8	11	Middling. Feet sore.	21	12	Middling. Knee bent a little.
9	12	Good.	22	12	Good.
10	9	Good.	23	12	Good.
11	11	Middling.			
12	13	Middling.			
13	11	Good.			

FEMALES.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	10	Good.	11	13	Middling.
2	10	Good.	12	13	Middling.
3	7½	Good.	13	14	Good Feet and knees tender.
4	10	Good.	14	11	Middling.
5	11	Good.	15	12	Bad. Knee tender.
6	10	Middling.	16	15	Middling.
7	12	Good.	17	14	Middling.
8	13	Good.	18	13	Middling. Feet sore.
9	13	Middling.	19	14	Middling.
10	10	Good.			

SUMMARY.

Total number of males examined below eighteen years of age	- 23	Total number of females examined under eighteen years of age	- 19
Number of males below eighteen having good health	- 15	Number of females below eighteen having good health	- 9
— — Middling health	8	— — Middling health	9
— — Bad health	- 0	— — Bad health	- 1
— — Deformities	- 1	— — Deformities	- 0

Tabular
Examinations.

Medical Examination of the Factory belonging to Mr. JOHNSON (Lace Mills),
at Derby, on 13th June 1833.

Temperature — Moderate.

Ventilation — Good.

Cleanliness — Considerable.

Work — Begins at five o'clock, and ends at seven o'clock.

Relaxation for meals — Half an hour for breakfast, one hour for dinner and tea, with no fixed time for lace-makers; and for mechanics the hours are from six to seven, with two hours for meals.

Hot water afforded gratuitously or not — Not.

Holidays in the year—Christmas Day, half day Shrove Tuesday, half day Ash Wednesday, one day and a half at Easter, two days and a half at Whitsuntide, and two half days at the races.

Medical assistance — Pays for accidents, and subscribes to the infirmary.

Total number of persons employed of all ages — 51.

Total number of persons employed below 18 years of age — 28.

General appearance and situation — Neat and cheerful.

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	17	Good. Foot sore.	15	13	Good. Legs ache.
2	16	Middling.	16	12	Good.
3	17	Good.	17	14	Good.
4	15	Middling. Foot tender.	18	15	Bad.
5	14	Good.	19	17	Good.
6	17	Good.	20	18	Middling.
7	16	Middling. Knees weak.	21	17½	Middling. Feet swelled.
8	16	Middling. Knees weak.	22	17	Middling.
9	15	Good.	23	17	Good.
10	15	Middling.	24	11	Middling.
11	14	Middling.	25	15	Bad. Feet sore.
12	16	Bad.	26	17	Not examined, been here only a day.
13	14	Middling.			
14	15	Middling.			

FEMALES.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	16	Good.	2	14	Good.

SUMMARY.

Total number of males examined	Total number of females examined
below 18 years of age - - 25	under 18 years of age - - 2
Number of males below 18 having	Number of females below 18 having
good health - - - 10	good health - - - 2
— — Middling health 12	— — Middling health 0
— — Bad health - 3	— — Bad health - 0
--- --- Deformities - 0	— — Deformities - 0

Medical Examination of the Factory belonging to Messrs. AMBROSE, MOORE, and Co. (Silk Mill), at the Depot, Derby, on 14th June 1833.

Tabular
Examinations.

Temperature — Highest of the throwing-room, 65.

Ventilation — Moderately attended to.

Cleanliness — Indifferent.

Work — Begins at six o'clock, and ends at seven o'clock.

Relaxation for meals — Twenty minutes for breakfast, one hour for dinner, twenty minutes for tea.

Hot water afforded gratuitously or not — Gratuitously.

Holidays in the year — Christmas Day, one day and a half at Easter, one day and a half at Whitsuntide, and two half days at the races.

Medical assistance — Subscribe to the infirmary.

Total number of persons employed of all ages — 280.

Total number of persons employed below 18 years of age — About 200.

General appearance and situation — Particularly well situated, cheerful and spacious.

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	13	Good.	28	13	Good.
2	11	Middling.	29	13	Good.
3	8½	Middling.	30	10	Good.
4	10	Good.	31	13	Good.
5	11	Good. Has worked here three years.	32	16	Good.
6	9	Good. Has worked here two years.	33	14	Middling.
7	12	Good.	34	14	Bad.
8	12	Good.	35	16	Bad. Knee suffers.
9	12	Good. Legs have suffered.	36	14	Good.
10	11	Good.	37	17½	Bad. Legs weak.
11	16	Good.	38	14	Bad. Knees a little bent inwards.
12	15	Good.	39	13½	Good.
13	14	Good.	40	17	Middling.
14	12	Middling. Foot sore.	41	17	Middling.
15	11	Good.	42	17	Middling.
16	9	Middling. Has worked here two years.	43	17½	Good.
17	12	Good.	44	14	Good.
18	10	Good.	45	13	Middling. Legs suffer.
19	13	Bad.	46	14	Middling.
20	10	Middling.	47	14	Good.
21	11	Good.	48	14	Good.
22	15	Middling.	49	16	Good.
23	14	Good.	50	14	Good.
24	10	Good.	51	13	Good.
25	14	Good.	52	14	Good.
26	12	Good.	53	17	Bad.
27	13	Good.	54	12	Good.
			55	11½	Good. Feet suffer.
			56	12	Good.

FEMALES.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	13	Middling.	9	12	Good.
2	10	Middling. Does not know her age.	10	15	Good.
3	12	Middling.	11	14	Middling.
4	11	Bad.	12	13	Middling.
5	10	Good.	13	12	Good.
6	15	Good. Feet swell.	14	13	Bad. Swelled legs.
7	13	Good.	15	13	Good.
8	10	Middling.	16	10	Bad. Leg ulcerated; ascribes it to standing.

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Tabular
Examinations.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
17	13	Bad.	48	11	Middling.
18	10	Good.	49	12	Good.
19	17	Bad.	50	12	Middling.
20	12	Bad. Pains in back.	51	15	Good.
21	12	Good. Knees a little bent inwards.	52	13	Good.
22	17	Middling.	53	11	Good.
23	17	Middling.	54	13	Good.
24	11	Good.	55	15	Good.
25	13	Good.	56	14	Good.
26	10	Good.	57	10	Good.
27	11½	Good.	58	12	Middling. Feet suffer.
28	11	Good.	59	14	Good.
29	10	Middling.	60	12	Good.
30	11	Good.	61	16	Good.
31	13	Middling.	62	11	Middling.
32	15	Good. Knees weak.	63	10	Middling.
33	12	Middling.	64	11	Good.
34	14	Middling.	65	14	Middling.
35	15	Bad. Feet often sore.	66	13	Bad. Knees suffer.
36	15	Middling.	67	9½	Good.
37	13	Middling.	68	9½	Good.
38	12	Good.	69	14	Good. Feet suffer.
39	11	Good.	70	15	Good.
40	10	Good.	71	15	Good.
41	14	Good.	72	13	Good.
42	12	Middling.	73	17	Middling.
43	13	Middling.	74	17	Middling.
44	10	Good. Has worked here three years.	75	15	Good.
45	16	Good.	76	15	Good.
46	11	Middling.	77	16	Good.
47	13	Middling.	78	15	Good.
			79	17	Good. Legs weak.
			80	16	Bad.

SUMMARY.

Total number of males examined below 18 years of age	- - 56	Total number of females examined under 18 years of age	- - 80
Number of males below 18 having good health	- - 38	Number of females below 18 having good health	- - 45
— — Middling health	12	— — Middling health	26
— — Bad health	- 6	— — Bad health	- 9
— — Deformities	- 1	— — Deformities	- 1

Note.—It has been an established rule of this mill, Mr. Turner affirms, ever since its existence, to refuse any children below nine years of age. The instances which occur in this mill of children working below nine years of age are introduced by the parents, who sometimes deceive Mr. Turner by stating the child to be older than is the truth. No register is kept of the age of the hands. Mr. Turner is ready to declare upon oath that during the last six months not a single accident has occurred on his premises. The twenty minutes allowed nominally for tea is not used, but is thrown in to make a little relaxation for the Saturdays, when the mill closes at five o'clock; the tea is brought to them if they please, and is taken standing.

Medical Examination of the Factory belonging to Mr. WILLIAM TAYLOR (old Silk Mills), at Derby, on the 11th June 1833.

Temperature — Highest, 71.

Ventilation — Indifferent.

Cleanliness — Little apparent attention paid to it.

Work — Begins at a quarter after six o'clock, and ends at seven o'clock. No holiday on Saturday.

Relaxation for meals — Half an hour breakfast, an hour and quarter at dinner, half an hour at tea.

Hot water afforded gratuitously or not — Not.

Holidays in the year — Christmas Day, Shrove Tuesday, Ash Wednesday, Easter Monday and Tuesday and Friday, Whit Monday and Tuesday, Good Friday, one day at the fair, two days at the races, and one day at Cheese Fair.

Medical

Medical assistance — Accidents are paid for.

Total number of persons employed of all ages — 327.

Total number of persons employed below 18 years of age — 128.

General appearance and situation — Old and decaying.

Tabular
Examinations.

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	11	Good.	31	10½	Good.
2	10	Good.	32	12½	Good.
3	12	Good.	33	11	Middling.
4	8½	Good. Has worked here nine months.	34	13	Good. Sore feet.
5	10½	Good. Has worked three years.	35	12	Good.
6	10½	Good. Has worked three years.	36	10½	Good. Has worked two years.
7	11½	Good. Has worked three years.	37	8½	Good. Has worked one year.
8	14	Good.	38	17	Good.
9	14	Good.	39	14	Good.
10	13	Good.	40	10	Good. Has worked two years.
11	14	Good.	41	12	Good.
12	12	Good.	42	11	Good.
13	11	Good.	43	13	Middling.
14	12	Good.	44	12	Good.
15	11	Good.	45	11	Good.
16	14	Good.	46	16	Good.
17	14	Good.	47	10	Good. Has worked two years.
18	13	Good.	48	14	Good.
19	8½	Good. Has worked one year.	49	10½	Good. Has worked two years.
20	16	Good.	50	12	Good.
21	10½	Good.	51	14	Good. Feet sore.
22	13	Good.	52	9½	Middling.
23	11½	Good.	53	10	Good.
24	15	Good.	54	11	Good.
25	11	Good. Club-footed, born so.	55	10½	Good. Has worked two years.
26	12	Middling.	56	11	Good.
27	15	Good.	57	13	Good.
28	13	Good.	58	13	Good.
29	10½	Good.	59	12	Good.
30	12	Good. Has worked here five years.	60	12	Good.

FEMALES.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	17	Good.	14	12	Good.
2	11	Good.	15	15	Good.
3	12	Good.	16	14	Good.
4	12	Good.	17	14	Good.
5	12	Middling.	18	8	Good. Has worked one year and a half.
6	9	Middling. Has worked here six months before nine years of age.	19	10	Middling.
7	12	Good.	20	12	Good.
8	12	Good.	21	12	Bad. Feet sore.
9	13	Good.	22	11	Good. Has worked three years.
10	13	Good.	23	8½	Good.
11	9	Good.	24	10½	Good. Has worked three years.
12	8½	Good.	25	13	Good.
13	10	Good.			

Tabular
Examinations.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
26	11	Good.	45	13	Good.
27	11	Good.	46	11	Good.
28	13	Good. Has worked one year and a half.	47	14	Good.
29	11	Middling.	48	12	Good.
30	13	Good.	49	11	Good.
31	9	Middling.	50	10½	Bad.
32	10	Good.	51	10½	Good.
33	12	Good.	52	10½	Middling. Has worked three years.
34	9	Good.	53	11	Good.
35	9½	Good. Has worked two years.	54	9½	Good. Has worked one year and a half.
36	8½	Middling. Has worked half a year.	55	10	Good.
37	14	Good.	56	12	Good.
38	13	Good.	57	14	Good.
39	10	Middling. Has worked two years.	58	11	Good.
40	12	Good. Left knee swelled and bent in.	59	14	Middling.
41	9½	Middling. Has worked one year and a half.	60	11	Good.
42	8½	Good. Has worked three months.	61	11	Bad.
43	10½	Good. Has worked two years.	62	13	Good.
44	14	Bad.	63	15	Middling.
			64	16	Good.
			65	14	Good.
			66	14	Good.
			67	14	Good.
			68	15	Bad. Legs swell.

SUMMARY.

Total number of males examined		Total number of females examined	
below 18 years of age -	60	under 18 years of age -	68
Number of males below 18 having		Number of females below 18 having	
good health -	56	good health -	52
— Middling health	4	— Middling health	11
— Bad health	0	— Bad health	5
— Deformities	0	— Deformities	1

Note.—Although I have been obliged to remark the number of children who have commenced work at too tender an age, I must add that the proprietor of this mill appears to treat his children with kindness, and that he is very anxious to prevent any harsh usage from being exercised towards them. Some of the children who are of this early age are not engaged by the proprietor of the mill, but are introduced by their own parents, and by other individuals, to work under them.

Medical Examination of the Factory belonging to Messrs. ARKWRIGHT
(Cotton Mill), at Matlock, on 4th June 1833.

Temperature — Highest, 74.

Ventilation — Indifferent.

Cleanliness — Moderate.

Work — Begins at six o'clock and ends at seven o'clock.

Relaxation for meals — Half an hour for breakfast, one hour for dinner, quarter or half an hour for tea.

Hot water afforded gratuitously or not — Gratis.

Holidays in the year — Christmas Day, Good Friday, Shrove Tuesday, half a day Whit Monday, 12th May half a day, half a day at Bonsale Wakes, four days at Cromford Wakes.

Medical assistance — Provided by the master gratuitously.

Total number of persons employed of all ages — About 350.

Total number of persons employed below 18 years of age — About 110.

General appearance and situation — Old.

Examination

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

Tabular
Examinations.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	16	Middling.	22	16	Good.
2	13	Good. Feet sore in summer.	23	13	Middling. Suffers cough from card-room.
3	14	Good.	24	15	Bad. Feet sore.
4	15	Good. Feet suffer.	25	13	Middling. Suffers from carding.
5	16	Middling.	26	12	Middling. Eye inflamed from carding.
6	15	Good. Legs suffer.	27	17	Middling.
7	14	Bad. Knees suffer.	28	14	Middling.
8	does not know	Middling. Feet suffer.	29	11	Middling. Suffers from carding.
9	12	Good. Legs ache.	30	12	Middling.
10	16	Good.	31	15	Bad.
11	13	Middling. Feet lame.	32	13	Middling. Sore feet.
12	16	Middling. Knees suffer.	33	18	Good.
13	13	Middling.	34	15	Middling.
14	15	Good. Eyes inflamed from carding-room.	35	13	Middling.
15	12	Bad.	36	14	Middling.
16	16	Bad. Knees suffer.	37	16	Good.
17	13	Middling. Feet sore.	38	14	Middling. Feet and knees suffer.
18	13	Middling. Pain in knees.	39	13	Middling.
19	12	Middling.	40	12	Middling. Feet sore.
20	17	Middling. Knee bent in from work.			
21	16	Middling. Suffers cough from carding.			

FEMALES.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	14	Good.	31	13	Bad. Feet and knees suffer.
2	15	Good.	32	16	Middling.
3	17	Good. Sore feet in summer.	33	11	Good.
4	16	Good.	34	12	Middling.
5	15	Good.	35	14	Middling.
6	15	Bad. Knees and feet tender.	36	13	Good.
7	16	Bad. Feet and knees suffer.	37	9	Good. Has worked here two years.
8	15	Good. Feet sore in summer.	38	13	Good. Feet and legs suffer.
9	14	Middling.	39	14	Middling. Left foot lame from work.
10	12	Good. Pain in knees.	40	14	Good.
11	16	Middling.	41	15	Good. Lame from her work.
12	16	Middling.	42	16	Good.
13	18	Middling.	43	13	Good.
14	18	Middling. Feet sore.	44	12	Good.
15	15	Middling.	45	12	Good.
16	13	Middling.	46	11	Good. Only came a week ago.
17	17	Middling.	47	12	Good.
18	14	Middling.	48	13	Middling. Feet and knees ache.
19	16	Middling.	49	13	Middling. Feet and knees ache.
20	16	Good.	50	13	Middling.
21	15	Bad. Sore eyes.	51	14	Good. Feet ache.
22	17	Middling.	52	17	Good.
23	13	Middling.	53	17	Middling. Knees and legs suffer.
24	11	Good. Only three weeks here.	54	17	Good.
25	11	Good.	55	17	Bad.
26	12	Good.	56	15	Middling.
27	13	Good.			
28	17	Middling.			
29	11	Good.			
30	16	Middling.			

Tabular
Examinations.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
57	15	Good. Legs and feet sore.	65	12	Middling.
58	15	Bad.	66	13	Middling. Cough from card-room.
59	17	Middling.	67	13	Middling.
60	15	Good. Bad feet.	68	13	Bad. Cough from card-room.
61	14	Middling. Bad feet.	69	11	Good.
62	16	Middling.	70	16	Good.
63	17	Bad.			
64	15	Middling.			

SUMMARY.

Total number of males examined	Total number of females examined
below 18 years of age - - 40	under 18 years of age - - 70
Number of males below 18 having	Number of females below 18 having
good health - - - 10	good health - - - 32
— — Middling health 25	— — Middling health 30
— — Bad health - 5	— — Bad health - 8
— — Deformities - 1	— — Deformities - 0

Medical Examination of the Factory belonging to Messrs. BRIDGETT and TRUE-MAN (Silk Mill), at Morledge, Derby, on the 12th June 1833.

Temperature — Highest, 66. (Steam.)

Ventilation — Indifferent.

Cleanliness — No apparent attention paid to it.

Work — Begins at six o'clock and ends at seven o'clock. No night-work.

Relaxation for meals — Half an hour for breakfast, one hour for dinner, half an hour for tea.

Hot water afforded gratuitously or not — Formerly, but not at present gratis.

Holidays in the year — Christmas Eve quarter of a day, Christmas Day and day after, Shrove Tuesday half, Ash Wednesday half, Easter Monday and Tuesday and half Friday, Whit Monday and Tuesday and half a day on Friday.

Medical assistance — Pays for accidents.

Total number of persons employed of all ages — 153.

Total number of persons employed below 18 years of age — 49.

General appearance and situation — Old and decaying.

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	11	Good.	10	13	Good.
2	10	Good.	11	12	Good.
3	11	Good.	12	10	Good.
4	11	Good.	13	8 $\frac{3}{4}$	Good. Has worked here one year and a half.
5	14	Middling. Ankles affected.	14	14	Good.
6	9 $\frac{1}{2}$	Good. Has worked here two years.	15	15	Good.
7	12	Good.	16	16	Good.
8	6 $\frac{1}{2}$	Good. Has worked here three months.	17	16	Good.
9	7 $\frac{1}{2}$	Good. Has worked here a year.	18	15	Good.
			19	16	Good.

FEMALES.

Tabular
Examinations.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	13	Good.	16	17	Bad.
2	14	Middling.	17	16	Middling.
3	12	Good.	18	17	Good.
4	12	Good.	19	17	Good.
5	13	Good.	20	17	Good.
6	11	Bad.	21	17	Middling.
7	16	Middling.	22	17	Good.
8	11	Middling.	23	13	Good. Feet affected.
9	10	Good. Feet sore.	24	12	Middling. Has worked five years, but not at this mill: began at Mr. Peel's mill.
10	16	Middling.			
11	14	Middling. Feet sore.	25	15	Middling. Eyes sore.
12	15	Good.	26	16	Bad. Left foot lame.
13	11 $\frac{3}{4}$	Good. Has worked four years and a half, but not at this mill.	27	17	Middling.
14	16	Middling.	28	17 $\frac{1}{2}$	Good.
15	16	Good.	29	15	Good.
			30	11	Good.

SUMMARY.

Total number of males examined	Total number of females examined
below 18 years of age - - 19	under 18 years of age - - 30
Number of males below 18 having	Number of females below 18 having
good health - - - 18	good health - - - 16
— — Middling health 1	— — Middling health 11
— — Bad health - 0	— — Bad health - 3
— — Deformities - 0	— — Deformities - 0

Note.—Those who are paid weekly wages are not allowed to go home for breakfast and tea, but take those meals on the spot. This is the case also, I believe, with several other of the silk-mills in Derby. A system of rewards is adopted as an encouragement for the children to industry, by giving them trifling sums, which are payable on their obtaining certain tickets. I noticed some aged women working in this mill; the oldest was seventy-three. The overlooker affirms that the children of a very low age are not engaged by the master of the mill, but by their own parents, and by other individuals, to work under them. This is probably the case with a small part of the children alluded to.

Medical Examination of the Factory belonging to Messrs. WOOD, ROWELL, and Co. at Manchester, on the 25th May 1833. (A small Mill,—cotton, silk, and worsted.)

Temperature — Moderate.

Ventilation — In one large room on the ground floor none at all; elsewhere moderate.

Cleanliness — Indifferent. Privies in the yard.

Work — Begins at seven o'clock, and ends at seven o'clock. Ends at four on Saturdays.

Relaxation for meals — One hour for dinner.

Hot water afforded gratuitously or not — Not.

Holidays in the year — Two days at Christmas, Good Friday, three hours on Easter Monday, four or five days at Whitsuntide.

Medical assistance — The owners subscribe to the infirmary and lying-in hospital.

Total number of persons employed of all ages — About 80.

Total number of persons employed below 18 years of age — 12.

General appearance and situation — Machinery appears old. Situation convenient.

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	17	Good.	2	9	Bad. Says he is going nine; has worked here a year already. (Absent on an errand.)

FEMALES.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	14	Good.	6	13	Middling.
2	11	Good.	7	13	Bad.
3	15	Middling.	8	13	Middling.
4	16	Middling.	9	13	Bad. Hip joint diseased before she came here.
5	15	Middling.			

SUMMARY.

Total number of males examined below 18 years of age	-	-	2	Total number of females examined under 18 years of age	-	-	9
Number of males below 18 having good health	-	-	1	Number of females below 18 having good health	-	-	2
—	—	Middling health	0	—	—	Middling health	5
—	—	Bad health	1	—	—	Bad health	2
—	—	Deformities	0	—	—	Deformities	0

Medical Examination of the Factory belonging to Messrs. PAUL CHAPPE (Cotton Mill), at Manchester, on the 27th May 1833.

Temperature—Spinning-room 79; throstle-room 78.

Ventilation—The means exist in most rooms but apparently neglected.

Cleanliness—Indifferent.

Work—Begins at half past five o'clock, and ends at seven o'clock.

Relaxation for meals—Half an hour for breakfast, one hour for dinner, and half an hour at tea for warehouse hands.

Hot water afforded gratuitously or not—Not.

Holidays in the year—Two days at Christmas, half a day at Easter, four days at Whitsuntide.

Medical assistance—Subscribes to the infirmary and to two dispensaries.

Total number of persons employed of all ages—229.

Total number of persons employed below 18 years of age—61 examined.

General appearance and situation—Adjoining the river Medlock, which makes the ground-floor damp in winter.

Examination of the Health of the Individuals employed below 18 years of age.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	9	Middling. Feet and knees tender.	12	10	Good.
2	11	Good.	13	11	Good.
3	13	Good.	14	12	Bad.
4	10	Good.	15	17	Bad. Has suffered from a wound in leg in Pooley's Factory.
5	13	Good.	16	17	Good.
6	13	Good.	17	13	Bad.
7	12	Good.	18	17	Middling. Foot sore.
8	9*	Bad.	19	16	Middling. Pains in knee.
9	11	Good.	20	16	Middling.
10	10	Good.	21	15	Bad.
11	10	Good.			

*This boy was nine last Christmas; he has worked for a year and a half before at two mills, Smith's and Morland's.

FEMALES.

Tabular
Examinations.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	13	Good.	20	15	Good.
2	13	Good.	21	16	Good.
3	12	Good.	22	16	Bad.
4	11	Good.	23	15	Middling.
5	11	Good.	24	17	Middling.
6	12	Good.	25	16	Good.
7	10	Good.	26	14	Good.
8	11	Only two days here (not considered).	27	17	Good.
9	11	Middling.	28	17	Good.
10	12	Good.	29	17	Good.
11	13	Good.	30	15	Good.
12	11	Bad.	31	17	Good.
13	13	Bad. Burnt in leg in factory.	32	15	Bad.
14	16	Bad. Health injured by an injury from machinery.	33	14	Good.
15	11	Middling.	34	17	Good.
16	13	Middling.	35	16	Good.
17	11	Middling.	36	15	Good.
18	11	Good. Feet sore.	37	17	Middling.
19	12	Middling.	38	16	Middling.
			39	15	Good.
			40	17	Good.
			41	16	Good.

All cotton-
winders and
makers-up.

SUMMARY.

Total number of males examined below 18 years of age	- - 21	Total number of females examined under 18 years of age	- - 40
Number of males below 18 having good health	- - 12	Number of females below 18 having good health	- - 26
— — Middling health	4	— — Middling health	9
— — Bad health	- 5	— — Bad health	- 5
— — Deformities	- 0	— — Deformities	- 0

Medical Examination of the Factory belonging to Messrs. CLAKES (Cotton Mill) at Manchester, on the 24th May 1833.

Temperature—Throstle-room 86; dressing-room 95 (at the end of ten minutes).

Ventilation—As good as the nature of the work is said to permit.

Cleanliness—Remarkable; no bad smells.

Work—Begins at half past five o'clock, and ends at seven o'clock.

Relaxation for meals—Half an hour for breakfast, one hour for dinner, half an hour for tea.

Hot water afforded gratuitously or not—Not.

Holidays in the year—Two days at Christmas, half a day at Easter, four days at Whitsuntide.

Medical assistance—Subscribes to medical charities.

Total number of persons employed of all ages—

Total number of persons employed below 18 years of age—About 160.

General appearance and situation—Machinery new; arrangements convenient.

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

No.	A	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	10	Bad. Lost a finger.	5	12	Bad. Sore eyes.
2	10	Bad.	6	13	Middling. Hearing bad; works in throstle-room.
3	11	Middling. Sore eyes.	7	13	Middling.
4	10	Good.			

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Tabular
Examinations.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
8	15	Middling.	45	15	Good.
9	13	Bad.	46	15	Middling.
10	10	Good.	47	15	Good.
11	13	Middling.	48	17	Middling.
12	12	Middling.	49	15	Good.
13	13	Middling. Feet sore.	50	17	Bad.
14	12	Middling.	51	16	Middling.
15	10	Good.	52	12	Good.
16	12	Middling.	53	17	Middling.
17	15	Bad.	54	15	Good.
18	16	Bad.	55	14	Bad.
19	12	Good.	56	14	Good.
20	10	Middling.	57	12	Good.
21	13	Bad.	58	15	Middling.
22	11	Middling.	59	14	Bad.
23	15	Bad.	60	13	Middling.
24	15	Good.	61	12	Good.
25	15	Middling.	62	16	Middling.
26	14	Good.	63	12	Good.
27	16	Middling.	64	10	Good.
28	16	Middling.	65	9	Good. Sore feet.
29	16	Good.	66	13	Good.
30	9	Good.	67	11	Middling.
31	15	Middling.	68	15	Middling.
32	16	Middling. Hand maimed.	69	15	Good.
33	16	Good.	70	} - Absent accidentally.	
34	14	Good.	71		
35	14	Middling.	72		
36	12	Good.	73		
37	16	Middling.	74		
38	17	Middling. Ankle swelled.	75		
39	13	Middling.	76		
40	12	Middling.	77		
41	11	Good.	78		
42	15	Good.	79		
43	15	Bad.	80		
44	13	Good.			

FEMALES.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	12	Good.	26	13	Good.
2	11	Good.	27	15	Middling.
3	12	Good.	28	14	Good.
4	11	Good.	29	11	Middling.
5	11	Good.	30	15	Good.
6	14	Good.	31	15	Good.
7	12	Good.	32	17	Middling. Knees bent in.
8	10	Good.	33	17	Middling.
9	9	Good.	34	16	Middling.
10	11	Good. Hand bruised.	35	17	Middling.
11	12	Good.	36	13	Good.
12	11	Good. Feet sore.	37	13	Middling.
13	12	Good. Knees and feet sore.	38	13	Bad.
14	12	Good.	39	14	Middling.
15	12	Good. Hand bruised.	40	17	Middling.
16	11	Middling.	41	14	Good.
17	13	Good.	42	15	Good.
18	12	Good.	43	15	Good.
19	13	Good.	44	13	Middling.
20	15	Good.	45	17	Good.
21	14	Bad.	46	17	Bad.
22	10	Good.	47	16	Good.
23	13	Middling.	48	16	Good.
24	12	Good.	49	9	Good.
25	14	Middling.	50	15	Good.
			51	17	Middling.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
52	17	Good.	67	12	Good.
53	14	Good.	68	13	Good.
54	15	Good.	69	14	Good.
55	14	Good.	70	13	Bad.
56	16	Middling.	71	14	Middling.
57	17	Good.	72	11	Good.
58	15	Good.	73	17	Middling.
59	17	Good.	74	13	Good.
60	16	Middling.	75	12	Good.
61	15	Bad.	76	15	Good.
62	13	Middling. Sore eyes.	77	14	Good.
63	11	Good.	78	11	Good.
64	10	Good.	79	15	Good.
65	14	Good.	80	13	Good.
66	12	Good.			

Tabular
Examinations.

SUMMARY.

Total number of males examined	Total number of females examined
below 18 years of age - - 69	under 18 years of age - - 80
Number of males below 18 having	Number of females below 18 having
good health - - - 27	good health - - - 56
- - - Middling health 30	- - - Middling health 19
- - - Bad health - 12	- - - Bad health - 5
- - - Deformities - 3	- - - Deformities - 1

Medical Examination of the Factory belonging to Messrs. HORACE MASON at Bakewell, on the 3d June 1833.

- Temperature—Seventy-five.
- Ventilation—Moderately good.
- Cleanliness—Indifferent.
- Work—Begins at six o'clock, and ends at seven o'clock.
- Relaxation for meals—Half an hour for breakfast, half an hour for tea, and one hour for dinner.
- Hot water afforded gratuitously or not—Gratis.
- Holidays in the year—Christmas day, two days and a half at Whitsuntide; about ten days in the year.
- Medical assistance—Subscribes to dispensary, and pays accidents.
- Total number of persons employed of all ages—About 150 to 200, fluctuating.
- Total number of persons employed below 18 years of age—90.
- General appearance and situation—Appearance moderately good; situation low.

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	15	Good.	13	14	Middling.
2	12	Bad. Feet sore.	14	12	Good.
3	12	Good.	15	15	Middling.
4	15	Middling.	16	13	Middling. Feet and knees tender.
5	11	Good.	17	14	Good.
6	14	Middling. Feet sore.	18	15	Middling. Pain in knees.
7	10	Bad. Feet sore.	19	15	Middling. Feet and knees tender.
8	15	Good. Feet sore.	20	12	Good.
9	14	Middling. Feet sore.	21	11	Good.
10	13	Middling. Feet sore.	22	12	Good.
11	16	Middling.			
12	15	Middling.			

Tabular
Examinations.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
23	13	Good.	30	13	Middling.
24	12	Good.	31	11	Good.
25	12	Good.	32	13	Good.
26	16	Middling.	33	10	Good.
27	12	Good.	34	10	Good.
28	13	Middling.	35	14	Good. Knees tender.
29	13	Good.	36	11	Middling.

FEMALES.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	16	Bad.	23	16	Good.
2	13	Bad.	24	14	Middling.
3	14	Bad.	25	15	Good.
4	12	Good.	26	14	Middling. Foot sore.
5	13	Bad. Feet sore.	27	12	Good.
6	16	Middling.	28	14	Good. Ankle tender.
7	16	Bad. Feet sore.	29	17	Good.
8	13	Middling. Ankle tender.	30	13	Good.
9	15	Middling. Feet sore.	31	17	Middling. Feet often sore.
10	17	Good.	32	13	Good. Ankles tender.
11	16	Middling. Feet sore in summer.	33	13	Middling. Feet sore.
12	17	Middling.	34	15	Good.
13	16	Middling. Feet sore.	35	12	Bad. Feet sore.
14	17	Middling.	36	16	Good. Feet sore.
15	17	Middling. Feet sore.	37	16	Middling. Feet sore.
16	17	Good.	38	17	Bad.
17	17	Middling. Feet sore, and knees and ankles often swell.	39	11	Middling. Feet sore.
18	17	Middling. Feet sore.	40	9	Good.
19	16	Middling. Feet sore, and knees often swell.	41	16	Bad. Feet sore.
20	17	Good.	42	11	Good. Feet sore.
21	15	Bad.	43	17	Middling.
22	17	Middling. Feet sore; knees and ankle swell.	44	14	Good.
			45	17	Good.
			46	14	Good.

SUMMARY.

Total number of males examined	Total number of females examined
below 18 years of age - - 36	under 18 years of age - - 46
Number of males below 18 having	Number of females below 18 having
good health - - - 19	good health - - - 18
— — Middling health 15	— — Middling health 19
— — Bad health - 2	— — Bad health - 9
— — Deformities - 0	— — Deformities - 0

Medical Examination of the Factory belonging to Messrs. GARDNER, ATKINSON, and Co. (Cotton Manufacturers), at Preston, on the 1st June 1833.

Temperature—Highest eighty-seven, but the weather on this day was extremely warm.

Ventilation—Moderate.

Cleanliness—Moderate.

Work—Begins at six o'clock, and ends at half past seven o'clock.

Relaxation for meals—Half an hour for breakfast and tea, one hour for dinner.

Hot water afforded gratuitously or not—Not.

Holidays in the year—Christmas Day, Good Friday, Whit Monday, one day and a half at the races in July.

Medical

Medical assistance—Subscribes to the dispensary at Preston.

Total number of persons employed of all ages—282.

Total number of persons employed below 18 years of age—115 to 120.

General appearance and situation—Indifferent.

Tabular
Examinations.

Examination of the Health of the Individuals employed below 18 years of age.

MALES.

No.	Age.	HEALTH OF MALES.	No.	Age.	HEALTH OF MALES.
1	18	Good.	43	13	Good.
2	14	Good.	44	10	Good. Has worked here two years.
3	13	Good.	45	11	Good. Pain in knees.
4	18	Bad.	46	13	Middling. Knee tender and red.
5	11	Bad.	47	14	Middling.
6	11	Good.	48	15	Good.
7	11	Good.	49	16	Good.
8	16	Good.	50	17	Good.
9	17	Middling.	51	16	Good.
10	17	Middling.	52	14	Bad.
11	15	Middling.	53	11	Good.
12	14	Middling.	54	13	Middling.
13	9	Good.	55	16	Good.
14	14	Good.	56	14	Good.
15	13	Good.	57	11	Good.
16	10	Good.	58	16	Middling.
17	14	Good.	59	16	Good.
18	12	Middling.	60	16	Good.
19	17	Middling.	61	16	Good.
20	12	Middling. Eyes inflamed since he has worked in mill.	62	18	Good.
21	16	Good.	63	15	Good.
22	11	Middling.	64	12	Middling. Feet and knees sore.
23	11	Good.	65	15	Good.
24	14	Middling.	66	16	Middling.
25	10	Good.	67	12	Middling.
26	12	Good.	68	15	Middling.
27	16	Good.	69	10	Good.
28	15	Good.	70	14	Good.
29	17	Good.	71	11	Good.
30	10	Good.	72	12	Good.
31	16	Good.	73	17	Middling.
32	13	Bad.	74	17	Bad.
33	12	Good.	75	17	Good.
34	15	Good.	76	12	Good.
35	10	Good.	77	13	Good.
36	15	Good.	78	16	Good.
37	15	Good.	79	15	Middling.
38	12	Good.	80	12	Bad. Feet sore sometimes.
39	12	Good.			
40	14	Good.			
41	13	Good.			
42	10	Middling. Has worked here two years.			

FEMALES.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
1	12	Good.	8	14	Good.
2	13	Good.	9	13	Middling.
3	13	Good.	10	12	Good.
4	13	Good.	11	11	Good.
5	13	Good.	12	16	Good.
6	13	Good.	13	13	Middling.
7	12	Good.	14	13	Good.

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Tabular
Examinations.

No.	Age.	HEALTH OF FEMALES.	No.	Age.	HEALTH OF FEMALES.
15	16	Good.	26	14	Middling.
16	16	Good.	27	15	Good.
17	16	Good.	28	12	Good.
18	16	Good.	29	15	Good. Ankle swelled.
19	17	Middling.	30	10	Good.
20	16	Good.	31	16	Good.
21	18	Good.	32	16	Good.
22	18	Good.	33	17	Good.
23	17	Good.	34	17	Good.
24	18	Good.	35	17	Middling. Ankle swelled.
25	14	Good.			

SUMMARY.

Total number of males examined	Total number of females examined
below 18 years of age - - 80	under 18 years of age - - 35
Number of males below 18 having	Number of females below 18 having
good health - - - 54	good health - - - 30
— — Middling health 20	— — Middling health 5
— — Bad health - 6	— — Bad health - 0
— — Deformities - 0	— — Deformities - 0

BISSET HAWKINS, M.D.

Manchester and
Salford.Appendix
to Dr. Hawkins's
Reports.

MANCHESTER AND SALFORD.

ACCIDENTS.

SALFORD.—Of 1,000 cases of accidents which occurred at the Salford and Pendleton Royal Dispensary, during a late period, and all taken indiscriminately, only 330 had happened to individuals belonging to factories, while 670 had happened to persons in other occupations. It must not however be necessarily concluded that *all* these 330 cases happened *in factories*; that word is only used to designate the *calling* of the patient. Mr. Fawcett, the resident medical officer, furnished this paper to Dr. Shaw, physician to the same dispensary, who kindly communicated it to the Commission.

The Ages and Occupations of 1,000 Cases of Accidents (taken indiscriminately) which applied for Relief at the Salford and Pendleton Royal Dispensary.

Of the Age of and under	Males.	Females.	Employed in Factories.	Other, or no Employment.	
5	50	30	—	80	Many of the accidents are of a very slight nature.
10	113	34	40	107	
15	122	73	118	77	Although 330 persons employed in factories have been treated for accidents, I have no proof that they all were received in the factory.
20	98	40	85	53	
35	169	92	66	195	
50	69	29	15	83	
Above 50	42	39	6	75	
	663	337	330	670	
	1,000		1,000		

The above interesting table was kindly furnished me by our resident medical officer, Mr. Fawcett, surgeon, under whose care the accidents which present themselves at the Institution are entirely placed.

Mosley Street, Manchester,
14th May 1833.

GEORGE SHAW, M.D.
Physician to the Salford and Pendleton Royal Dispensary.

MANCHESTER.—Accidents on which an inquest has been held by the *coroner* during the last nine months. (He has only held office during that time.)

N.B.—His district includes 450,000 souls.

69 are burns chiefly of children.

56 drowned.

23 falls.

67 other accidents.

Exclusively of thirteen fatal accidents from machinery.

Accidents from machinery, distinguishing the nature of the work in which they occurred, between 1st August 1832 and 3d May 1833.

8 in cotton mills.

1 - flax mill.

1 - silk mill.

1 - print works.

1 - dye-house.

1 - bleaching works.

13

and of sixteen fatal accidents in coal-pits during the same period of nine months.

Manchester and
Salford.

Appendix
to Dr. Hawkins's
Reports.

A List of the Number of Accidents occurring to Individuals engaged in the following Occupations, admitted into the Manchester Royal Infirmary during Twelve Months, viz. from May 1832 to May 1833, with the Termination of each Case.

Employment.	Cured.	Dead.	Total.	REMARKS.
Cotton-factory* -	60	6	66	Three required amputation of a leg, and four of an arm: five of the 66 were under the age of ten.
Labourers -	44	7	51	
House-work -	37	5	42	
Colliers - -	22	2	24	
Weavers -	20	2	22	
Carters - -	15	1	16	One arm amputated.
Print-works -	11	4	15	
Joiners - -	10	2	12	
Warehousemen -	9	2	11	One arm amputated.
Mechanics -	9	1	10	
Bricksetters -	9	1	10	
Porters - -	9	-	9	
Dyers - -	5	1	6	
	260	34	294	

1st May 1833.

RICHARD MARSDEN,
House Surgeon.

* Inquiries made by the committee of masters, as to how many out of the 66 cases of factory workmen really met with their accidents *in* a factory, go to prove the following important distinctions; viz. that out of the 66 cases, 15 belonged to *other* towns and districts, leaving to Manchester only 51, of which the following is a discriminative summary:

Of the 51, 1 was an accident by machinery in a silk mill.
1 do. do. flax mill.
15 do. do. cotton mills.
3 fell through trap-doors or teagle holes; and
4 cannot be found.

The other 27 accidents occurred to factory classes *when away from their work*.

RESULTS of personal Inquiries made into the Cases of SURGICAL IN-PATIENTS at the ROYAL INFIRMARY, reported as attaching to MILL EMPLOYMENT, from May 1832 to May 1833.

Name.	Age.	Abode.	Disease.	How Accident occurred.
Geo. Newton - E	13	Silver-street -	Lacerated back - -	Cannot be found.
John Kitchen - F	9	32, Gt. Ancoats-st.	Fracture fore-arms, dis-located elbow -	Not a mill hand. Sent with his father's dinner, and fell through a teagle hole, 5 stories.
James Wardle - A	17	Commercial-street	Injury to eye - -	Had his eye injured by a stone whilst standing at his own door.
Joseph Mellor - I	17	1, German-street -	Lacer. face - -	Was ridden over in the street by a horse belonging to Mr. Watts of Deansgate.
John Tooney - E	21	Heath - -	Lacer. arm - -	Cannot be found.
John Craven - H	29	Back Fawcett-street	Contus. knee - -	Fell in the street, returning from market one Saturday night.
William Barlow - E	47	43, Angel-street -	Lacer. head - -	Hurt by the wadding or shot from pistol or gun when passing the cholera hospital.

Name.	Age.	Abode.	Disease.	How Accident occurred.
Ellen M'Cormack - B	18	James Leigh-street	Contusions - -	These persons, seven in number, were all injured by the falling of a floor in a building which had been used as a Catholic Sunday-school.
Brid. M'Kew - - B	18	Bent-street - -	Ditto - -	
Mary Collins - - B	19	Emery-street - -	Ditto - -	
Catherine Ready - B	10	Bent-street - -	Ditto - -	
Catherine Dean - B	17	John-street - -	Ditto - -	
Jane Daly - - B	16	Cayley-street - -	Ditto - -	
Catherine O'Neil - B	19	Little Ireland -	Ditto - -	
Wm. Judge - - E	12	Oldfield-road -	Comp. fract. - -	Hurt by climbing up and falling from a spout to recover a lost play ball.
Eliz. Costin - - E	12	Gaythorn - -	Lacer. arm - -	By a wheel in Birley and Kirk's card room.
Ann Long - - E	16	Bengal-street -	Sprained ankle - -	Cannot be found. No such person is believed to have lived in Bengal-street for three years.
Catherine Casey - E	57	Henry-street -	Contus. ankle - -	By the falling of a stage in Blossom-street, on the day of the procession for Reform Bill.
Isaac Fidler - - E	14	Lower Temple-st. -	Frac. hum. - -	Holding a strap to be repaired whilst the drum was going round, in Green's mill.
David Gillon - D	11	Gregson-street -	Comp. fract. fem. -	Fell through a trap door.
Rich. Keate - - C	-	42, Lees-buildings, Jackson-street.	Injury to per. - -	Was injured whilst playing upon the rails at Ardwick-green.
Ann Caton - - H	10	Back Mill-street -	Lacer. arm - -	Apron caught in winding machine.
Wm. Mackay - G	14	8, Camplin's-build- ings.	Frac. elbow - -	At Taylor and Shatwell's mill; card-room.
James Murphy - D	15	Back Quay-street -	Frac. fem. - -	Fell out of a cart in the street.
James Pixton - F	10	10, Darlington-sq. -	Burn - -	Burnt in his own house.
Mary Gafney - - D	37	Back Irwell-street -	Lacer. scalp - -	Done in a factory; now quite well.
Henry Cadman - C	11	60, Rushulme-road	Amput. arm - -	By machinery at Messrs. Birley and Kirk's.
Chas. Quin - - E	16	15, Back Mount- street.	Comp. fract.; arm amput.	Dead. Caught by geering wheels, he cleaning them whilst at work.
John Davenport - F	21	Pollard-street -	Arm amput. - -	At Clarke's mill, by blowing machine.
Wm. Hopley - - E	9	Ashton-street -	Frac. tib. - -	By jumping, or some other play.
Robt. Robinson - E	16	Nunn's-square -	Amp. legs - -	Dead. Caught by the strap of blowing machine in Jas. Guest's mill.
James Locke - B	11	Hunt-street -	Lacer. arm - -	By machinery at Green's works.
Mary Ann Brady - D	11	3, Queen-street -	Comp. fract. arm -	Dead. At Mr. Royle's silk mill.
John Green - - E	16	6, Deansgate -	Comp. disloc. elbow -	Caught by scutcher strap in Gould and Cooper's mill.
Ralph Clegg - - E	15	4, Shaw's-brow -	Comp. fract., arm amput.	Dead. Caught by a strap, and taken round the shaft, in Renshaw's flax-mill.
Jno. Griffiths - A	38	Gilbert-street -	Injury to eye - -	Eye struck out with a poker by his wife, she being irritated at his drunkenness.
Margaret Hughes - E	23	50, Fleet-street -	Fract. nose, &c. -	Fell four stories, from a teagle in Crewdson's mill.
M. A. Purslow - J.K.	25	John-street, Ancoats	Blow on abdom. - -	A fall in her own house.
Wm. Breregan - D	12	8, Gregson-street -	Contus. thigh - -	Hurt by a teagle, whilst playing with another boy.
Ann Hassall - - H	29	Bradley-street -	Fract. ribs - -	Four ribs broken by a man in a quarrel at a public house one Saturday night.
Mary Anderson - E	26	Ludgate-street -	Lacer. forehead -	By a jug and glass being thrown at her in the Spread Eagle public house, Newmarket.
John Knowles - E	15	2, Beckett-street -	Lacer. leg - -	Caught by throstle-wheels whilst pushing a doffing-can at Harbottle's mill.
Mary Ann Coyle - H	22	Henry-st., Ancoats	Burn - -	Dead. Fell asleep by the fire, at home.
Adam Oldham - H	15	37, Pot-street -	Fract. fem. - -	Fell upon a brick whilst playing, and broke his thigh.
John Lynch - - I	23	Back Blakely-street	Wound abdom. -	Struck by mistake in a battle in a public house; hurt in head and abdomen.
Mary Heyes - - E	13	17, Booth-street -	Lacer. back - -	Hurt by a hook in the wall of their own house, when endeavouring to escape from a beating from her mother.

Name.	Age.	Abode.	Disease.	How Accident occurred.
Ellen Whitworth - E	-	Ferneley-street -	Contusions -	Clothes caught by a shaft, Mr. Gough's mill.
Thos. Nicker - E	12	Coronation-street -	- - -	Kicked by a horse in a show at Knott Mill fair.
Catherine Smith - E	44	Ancoats -	Amput. fingers -	Cannot be found.
Jonathan Gerrard - E	14	Bradford-street -	Amp. two fingers -	Feeding rollers of blowing machine at Mr. Guest's mill.
James Heys - E	14	90, Bradford-street	Amp. fingers -	Caught in wheels of tumbling-shaft at Mr. C. Pooley's mill, whilst oiling.

The total cases of accidents recorded in the list of surgical in-patients at the Manchester Royal Infirmary, from 1st May 1832 to 1st May 1833, as attaching to persons working in mills, amount to - - - - - 66
Of which belong to other towns and districts 15
Leaving as the actual number for Manchester 51 For the particulars of which vide annexed report.

SUMMARY.

1 accident by machinery in silk-mills.
1 do. - do. flax-mills.
15 do. - do. cotton-mills.
3 fell through trap-doors or teagle holes.
4 cannot be found.
27 occurred when away from work.
51 cases.

We the undersigned hereby certify, that the results of Inquiry appended to the cases enumerated in this list are those which were received by us upon personal application to the parties themselves, their relatives or friends.

A. J. Wolfenden.
B. Jos^h Holland.
C. W^m Silkstone.
D. G. R. Chappell.
E. Shakespear Dyson.

F. W. Acton.
G. Thomas Dalton.
H. A. Buckley.
I. S. Woodhouse.
J. K. I gave the recommendation.

JAMES KENNEDY.

BASTARDY.

The township of Manchester, it must be recollected, contains 142,000 souls.
Bastard children now on the books, 1,189, on the 25th of April 1833.

Bastard Children affiliated in the following Years.

Date.	Male.	Female.	Total.	The Mothers belonging to			Total.
				Manchester.	Out Towns.	Ireland.	
1824	124	157	281	218	48	15	281
1825	127	114	241	183	42	16	241
1826	137	153	290	216	38	36	290
1827	125	109	234	162	38	34	234
1828	107	117	224	170	41	13	224
1829	131	113	244	194	21	29	244
1830	96	120	216	160	24	32	216
1831	91	107	198	160	20	18	198
1832	112	118	230	179	29	22	230

16th May 1833. N. GARDINER, Directing Overseer.

BENEFIT SOCIETIES.

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Attached to most of the Sunday-schools is a sick-club and a funeral-club; their regulations are generally as follow:—In the German Street Sunday-school sick society, scholars at ten years become members on paying $\frac{1}{2}d.$ per week, and receive 2s. 6d. per week when ill; at fourteen years of age, scholars subscribe 1d. per week, and they receive when sick 5s. per week. This society has at present 287 members, 89 of whom pay $\frac{1}{2}d.$ and the rest 1d. per week. During 1831, 92 members came on the sick list, and received relief for 468 weeks. This gives an annual amount to each member of 5 weeks and 14 hours sickness.

The committee of St. Augustine's catholic-school sick society, Granby-row, established in the year 1818, for the purposes of supporting its sick and interring its deceased members, have made the following report for the year 1832:—

Not one member of this society (so far as came within the cognizance of this committee) has fallen a victim to cholera.

The following females have received the sick allowance.

	weeks pay.		weeks pay.		weeks pay.
Mary Atkinson	4	Catharine Diamond	1	Susanna M'Nally	6
Eliza Burke	- 5	Mary Farrell	- 2	Mary Ann Magee	5
Helen Berry	- 2	Jane Fitzgerald	2	Ellen M'Cann	2
Elizabeth Bell	6	Alice Fitzakerly	2	Ann M'Cann	- 1
Susanna Burns	4	Rosana Fitzwilliams	7	Hellen M'Donald	4
Elizab. Cragan	9—26	Bridget Gallagher	5	Diana Taylor	3
Sarah Cavannah	9	Susanna Daly	1	Elizabeth Macabe	4
Mary Connell	3	Ann Hutchinson	1	Sarah M'Caffrey	1 d
Eliza Carter	- 1	Mary Heald	- 1—8	Mary Magowan	3
Mary Cavannah	1	Mary Henesey	1	Mary Maguire	2
Bridget Cusack	6	Ann Whitfield	1	Mary Ann Murphy	2
Bridget Coyle	7	Margaret Hughes	6	Maria Moore	1
Eliza Cavannah	1	Elizabeth Higgins	3	Mary Ann Mullaly	1
Catherine Collins	1	Mary Higgins	1	Susanna Morris	1
Jane Collins	- 1	Ellen Jordan	- 1	Mary Naylor	- 2
Catharine Wild	4	Mary Kelly	- 4	Ann Parsons	- 2
Ann Calderhank	2	Mary Ann Lindall	2	Mary Roney	- 4—3 d
Jane Diamond	3	Mary Lannon	1	Elizabeth Ryan	2
Helen Daly	- 1	Mary M'Donald	1	Mary Riley	- 1
Ann Dempsey	2	Sarah Martin	1	Ann Shea	- 4
Mary Ann Day	3	Mary Mackey	1	Charlotte Stringer	2

The following males have received the sick allowance.

George Burnet	1	Francis Gough	1	James Maguire	2
Thomas Connolly	1	John Higgins	- 2	William M'Cormick	2
Francis Campell	1	Michael Higgins	3	James Moony	2
Owen Carroll	- 4	Thos. Higgins sen.	7	William M'Givern	1
Peter Derham	1	Thos. Higgins jun.	3	Henry M'Graw	2
John Daly	- 3	John Hare	- 1	John Read	- 4
Peter Duffy	- 2	Cornelius Hackett	2	William Ryan	2
Thomas Dagnall	1	James Hackett	3	James Ryan	- 1
Francis Diamond	2	Richard Introvinie	6	James Scott	- 2
James Derham	1	Peter Kelly	- 1	William Scott	11
Daniel Farrell	6	James Kelly	- 1	James Skeite	1
Robert Fitzgerald	1	John Leslie	- 1	John Sheridan	2
John Genchlow	5	Joseph F. Lowe	5	John Unsworth	7
Andrew Gorman	2	William Murphy	7	John H. Woodroffe	2
John Gallemore	2	Peter M'Cormick	2	James Daly	- 2
James Griffiths	1				

Females, 337.

Males, 188.

Total number of members, 525.

DEATHS.

Mary Roney.

Sarah M'Caffrey.

It appears from this report, that the average quantity of annual sickness is nearly 4 days (or 3 days 22 hours and a fraction): such is the result which we obtain by dividing all the weeks of sickness, 294, amongst the 525 members. The mortality for the year 1832 was one in 262 $\frac{1}{2}$.

(D. 3.)

M m 4

Receipts

Receipts and Disbursements, from April 1832 to May 1833.

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RECEIVED.

Subscriptions - £115 8 6

£115 8 6

PAID.

Sick - - - £64 12 0
Two members dead - - 8 0 0
Mr. Jeffs, surgeon - - 12 10 0
Mr. Higgins senior, visiting - 1 17 0
Mr. James Woodroffe, secretary 5 0 0
Stationery, &c. - - 3 6 0

£95 5 0

STATE OF THE FUNDS.

Cash in Jones & Co.'s bank, £71 6s. Cash on hand, £1 6s.

SICK AND FUNERAL SOCIETY OF THE BENNETT STREET SCHOOL.

This Sunday-school is perhaps the best-conducted one in Manchester. The greater part of the scholars subscribe to one or both of the societies. In 1832 there were 836 subscribers to the sick society, and 1,093 subscribers to the funeral society.

The annexed table gives the mortality of each year; a very few remain on the books after twenty years of age as old scholars.

A TABLE shewing the Number of DEATHS since the Commencement of the Sick and Funeral Society, with the proportionate Ages.

Year.	No. of Members.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	Above 25.
1812	70	—	—	—	—	—
1813	80	—	—	—	—	—
1814	420	—	—	—	1	—
1815	440	—	2	1	1	—
1816	490	—	1	4	1	—
1817	910	2	3	—	—	1
1818	930	2	1	2	—	—
1819	980	2	3	4	2	—
1820	1,000	—	4	7	1	—
1821	1,120	3	2	—	—	1
1822	1,150	4	1	2	—	2
1823	1,190	1	3	1	1	—
1824	1,080	—	2	2	1	—
1825	1,231	2	—	3	2	1
1826	1,420	2	3	1	2	—
1827	1,704	3	4	1	2	—
1828	1,890	3	6	6	—	1
1829	1,830	4	4	6	2	—
1830	1,930	6	4	2	—	2
1831	1,929	6	7	3	1	1
1832	1,932	9	7	4	2	3
		49	57	49	19	12
Total 186.						

These tables unfortunately do not throw a certain light on the health of factory children, because a considerable part of the number (perhaps one half) are taken from other and usually *easier* conditions, as from children living at home with their parents, young girls in service, and miscellaneous trades.

In the year 1830 there were 975 members in the sick society, of whom 191 came on the sick list, and received payments for 794 weeks. If we divide the 794 weeks among the 975 members we shall obtain a result of 5 days 16 hours and a fraction, as the average amount of sickness for each member; but if we divide the weeks among the 191 members who actually came on the sick list, we obtain 4 weeks 1 day 2 hours and a fraction for each.

In 1831, 204 members came on the sick list, and received payments for 935 weeks. In this year the average duration of sickness for each invalid is above 4 weeks.

In 1832, the number of sick members was 214, and these 214 received payment for sickness of 987 weeks duration. Of the 214 members who came on the sick list, 25 died. If we

we divide the 987 weeks amongst all the members of the sick club, namely 836, for this year, we obtain a larger amount of illness than in the year 1830; it is 1 week 1 day and 6 hours and a fraction. The amount of illness for the 214 members who actually came on the sick list was 4 weeks 4 days and 6 hours.

The mortality of the entire funeral and sick clubs, on the average of four years, viz. 1829, 1830, 1831, and 1832, has been annually about 1 in 104.

If we take the average of the three years, 1830, 1831, and 1832, we shall find that the number of sick annually was about one fourth of the whole subscribers to the sick society. With respect to the intensity of their complaints, I can safely say from my own inquiries, that the factory members only come on the sick list in *severe* cases, since their parents are not usually very ready to dispense with the wages derived from their labour. I have repeatedly examined factory-children in Sunday-schools and at the commission-room, who were still engaged in factory-work at the very time when they were labouring under acute maladies. I notice this point the more because the Highland Society, in attempting to make an approximation to the truth on this subject, assume that of 10 weeks sickness among persons of all ages under 70, five may be adduced as *walking sickness*: Now as far as regards the average *published* sickness of factory children, I have reason to believe, that instead of one half of their weeks being a *walking* sickness, not one quarter will be found to be the case. The observation of the Highland Society is probably quite true in relation to individuals more free in their agency and more fortunate in their circumstances than factory-children.

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CHOLERA.

Of the whole number of Manchester cases, Dr. Gaulter affirms that very few indeed were employed in factories; and that of these a pretty large proportion were at the time of their seizure out of work or detained at home. Of the first 200 cases only 23 worked in factories; of these 23, Dr. Gaulter states that 12 were out of work or accidentally remaining at home. Of 1,520 workpeople in the largest cotton establishment in Manchester (that of Messrs. Birley and Kirk), only 4 were attacked, according to the same authority. (See Dr. Gaulter on the "Origin and Progress of Malignant Cholera in Manchester." London, 1833.)

The deaths from cholera in Manchester and its vicinity appear to have been rather more numerous than the recoveries; the cause is to be sought, either in the condition of the persons attacked, or in the circumstance that the Manchester Board of Health required the cases that were reported to it to be accompanied by a detailed account of the symptoms, and that they excluded all that were not marked by those of the malignant cholera; the number of cases thus became lessened, but the deaths were increased.

NUMBER of CASES from the Commencement of the Disease on the 12th of May to December 1832.

	Attacked.	Died.	Recovered.	Death or Recovery unreported.
Treated at the Swan-street hospital - -	443	234	209	—
Do. at the Knott-mill do. - -	242	122	120	—
Do. at their own dwellings - -	640	318	295	27
Total - -	1,325	674	624	27

Mr. Harrison, the surgeon of the poor-house of Manchester, informs me, that according to his experience cholera attacked the hand-loom weavers (who work at their own homes) more than other classes. In the very large and excellently-managed poor-house of which he has the charge, only 7 cases occurred; they were all males, and all died.

CHOLERA in SALFORD.

Population 40,786. First cases 26th June and 13th July, last case 7th Nov. 1832.	Attacked.	Died.	Recovered.
In the township (all treated at home) - -	640	197	428
In the New Bailey prison - -	60	19	46
Total - -	700	216	474

CHOLERA in the Township of CHORLTON-UPON-MEDLOCK.

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Population 20,569. First case 13th July, last case 4th Dec. 1832.				Attacked.	Died.	Recovered.
Treated in the hospital	-	-	-	29	17	12
Do. at home	-	-	-	57	17	40
Particulars unreported	-	-	-	2	—	—
Total	-	-	-	88	34	52

The Ages, Sex, Employments, Recoveries, and Deaths of 443 PATIENTS treated for CHOLERA in the Swan-street Hospital, Manchester, between the 24th of June and the 8th of December 1832.

Age.	Sex.		Recoveries.		Deaths.		Employment of Patient, or of Husband, or of Parents.			
	Male.	Female.	Male.	Female.	Male.	Female.				
Under										
5	9	14	5	6	4	8	Weavers * -	98	Painters and glaziers - }	3
10	18	12	10	5	8	7	Factory † -	69	Smiths -	5
15	16	11	10	5	6	6	Winders ‡ -	25	Shoemakers -	14
20	9	15	6	13	3	2	Spinners -	10	Tailors -	9
25	10	17	6	12	4	5	Carders and } Warpers - }	3	Whitewashers §	4
30	18	25	10	13	8	12	Fent-stitchers	3	Washerwomen	9
35	18	25	7	14	11	11	Fust ⁿ -cutters -	9	Charwomen -	9
40	12	18	4	9	8	9	Calenderers -	3	Nurses -	8
45	22	24	17	12	5	12	Dyers -	2	Servants -	9
50	22	21	8	12	14	9	Printers -	3	Porters -	8
55	25	12	5	5	20	7	Butchers -	3	Labourers -	23
60	10	10	3	4	7	6	Bakers -	6	Bricklayers -	9
65	5	16	—	3	5	13	Basket-makers	5	Hawkers, &c. -	8
70	7	7	3	2	4	5	Dress-makers	9	Watchmen -	4
80	6	5	1	—	5	5	Joiners -	7	Boatmen -	2
90	1	2	—	—	1	2	Hatters -	2	Mendicants -	3
90	1	2	—	—	1	2	Greengrocers -	4	Prostitutes -	4
100	—	1	—	1	—	—	Mechanics -	2	Unknown -	49
	208	235	95	116	113	119		263		180
Total	443 =		211 +		232		443			

* Weavers ; ²/₁₀ths, or nearly so, were hand-loom weavers.

† Factory ; under this term I include scavengers, piecers, reelers, &c. &c.

‡ Winders ; silk and cotton.

§ All employed by the Board of Health.

|| Four belonged to the Swan-street hospital.

N.B.—A large proportion of the patients came into the hospital in a state of collapse. The previous health of many was bad, and their habits of life very irregular.

The above table has been drawn up with great care from the registers kept by our intelligent and zealous resident medical officer, Mr. Lynch, surgeon, of Manchester, to whom I beg to offer my best thanks for his kindness.

Mosley-street, Manchester, }
14th May 1833.

GEORGE SHAW, M. D.,
Physician to the Hospital.

The Ages, Sex, Recoveries, and Deaths of 580 PATIENTS treated for CHOLERA at their own Residences in SALFORD.

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Age.	Sex.		Age.	Sex.				Recoveries.		Deaths.	
	Male.	Female.		Male.	Female.						
Under			Under								
5	5	7	142	142	169						
10	13	13	50	11	12	Male -	205	Male -	116	Male -	83
15	2	9	55	16	12						
20	9	6	60	9	12	Female -	253	Female -	138	Female -	94
25	11	20	65	13	24						
30	16	22	70	5	12						
35	30	25	80	9	8	Unknown	122		254		177
40	36	33	90	—	3						
45	20	34	100	—	1						
	142	169		205	253	Total -	580	Unknown	149	+ 431 =	580

N.B.—A large proportion of cases occurring in Salford were of a mild character. Medical was early applied for, because the patients were visited at home, and not taken to any hospital, against which strong prejudice existed.

From the imperfect manner in which the registers of the Salford Board of Health were kept, I regret to say that I am unable to give more accurate information. In very few instances were the employments of the patients noted down.

Mosley-street, Manchester,
14th May 1833.. }

GEORGE SHAW, M. D.,
Chairman of the Medical Committee of the
Salford Board of Health.

SCHOOL FOR THE DEAF AND DUMB.

This institution has about 50 scholars at present, 28 boys and 22 girls; a portion of these pay for their education, while the poor are admitted gratuitously. The children of factory parents are rarely seen here; one of the present inmates is the child of an overlooker at a mill.

m	1	Small spinner.	m	29	Weaver.	f	57	Warper.
m	2	Hatter.	m	30	Labourer.	f	58	Shopkeeper.
m	3	Mother washerwoman.	m	31	Calico-printer.	f	59	Hatter.
m	4	Shopkeeper.	m	32	Weaver.	f	60	Collier.
m	5	Spinner.	m	33	Do.	f	61	Hatter.
m	6	Cloth-dresser.	m	34	Mason.	f	62	Spinner.
m	7	Weaver.	m	35	Weaver.	f	63	Weaver.
m	8	Collier.	m	36	Brewer.	f	64	Paper-maker.
m	9	Weaver.	m	37	Weaver.	f	65	Plasterer.
m	10	Collier.	m	38	Groom.	f	66	Mother a widow.
m	11	Bookseller.	m	39	Weaver.	f	67	Farmer.
m	12	Gentleman.	m	40	Labourer.	f	68	Labourer.
m	13	Overlooker in mill.	m	41	Sawyer.	f	69	Labourer.
m	14	Weaver.	m	42	Joiner.	f	70	Calico-printer.
m	15	Policeman.	f	43	Pattern-drawer.	f	71	Labourer.
m	16	Mother a widow.	f	44	Shopkeeper.	f	72	Mother a poor widow.
m	17	Dyer.	f	45	Weaver.	f	73	Book-keeper.
m	18	Officer in army.	f	46	Do.	f	74	Labourer.
m	19	Serjeant militia.	f	47	Do.	f	75	Labourer.
m	20	Bricklayer.	f	48	Engineer.	f	76	Smith.
m	21	Watchman.	f	49	Salesman.	f	77	Tailor.
m	22	Farmer.	f	50	Weaver.	f	78	Labourer.
m	23	Do.	f	51	Cloth-dresser.	f	79	Smith.
m	24	Mother a widow.	f	52	Joiner.	f	80	Book-keeper.
m	25	Schoolmaster.	f	53	Farmer.	f	81	Publican.
m	26	Weaver.	f	54	Shoemaker.	f	82	Mother a poor widow.
m	27	Farmer.	f	55	Weaver.			
m	28	Paper-maker.	f	56	Deserted by parents.			

25th May 1833.

WM. VAUGHAN,
Teacher of the Manchester School for Deaf and Dumb

Manchester and
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MISCELLANEOUS NOTES ON FACTORY CLASSES.

1 Great want of places of exercise and of open spaces at Manchester.

One of the greatest benefits which could be granted to the lower classes of Manchester, and particularly to those who work in factories, would be a public garden or small park. Two such gardens are, perhaps, more than we can reasonably anticipate, where even one has been so long absent. Manchester seems to stand alone, of all the cities of Europe, in this respect; but when we consider the opulence of her merchants, the grand scale of her public buildings, and her variety of useful institutions, it is impossible to repress our surprise that not even the semblance of a public garden is to be found in Manchester. I am not aware that even a single private dwelling contains a garden. This circumstance is attributed to the great value of ground, and to a blighting atmosphere; both of these impediments might, however, be overcome (and we may confidently hope that they will be overcome) by a steady exertion of capital. The stranger is astonished at finding not a single outlet where the face of nature can be seen.

2. INFANT SCHOOLS are of the utmost importance at Manchester and in other manufacturing districts, on account of the long absence of the parents from home. There are two at Manchester; one has a playground, the other has none. This point is important.

3. STATEMENT of the Number of Cases in one large Spinning Establishment in MANCHESTER in which the Children employed therein are compelled, not only to support themselves but whole Families.

No.	Members of a Family at work.	Ages.	Total sum earned.	Total Number of Persons in the Family supported by such Earnings.
			<i>s.</i> <i>d.</i>	
1	3 Children.	10, 12, & 14	12 8	9 Individuals.
2	3 —	16, 17, & 18	21 3	7 —
3	2 — and father	11 & 17	19 5	6 —
4	3 —	9, 12, & 15	12 4	8 —
5	2 —	15 & 18	13 6	4 —
6	3 —	15, 17, & 19	21 0	8 —
7	1 —	15	5 8	5 —
8	3 —	12, 14, & 16	16 8	6 —
9	4 —	9, 13, 16, & 18	19 4	11 —
10	3 —	12, 16, & 19	20 0	5 —
11	3 —	10, 12, & 15	13 10	6 —
12	3 —	14, 17, & 19	19 11	7 —
13	3 —	12, 13, & 15	13 9	7 —
14	3 —	12, 14, & 16	14 8	7 —
15	1 —	17	6 2	3 —
16	2 —	15	12 0	6 —
17	2 —	9 & 10	5 10	5 —

No. 2 case receives 1*s.* 6*d.* per week from the parish.

— 4 do. has received 5*s.* ditto from the parish, for about 6 weeks.

— 5 do. has ditto 3*s.* ditto from the parish, for 2 months.

— 9 do. receives 3*s.* ditto from ditto.

— 13 do. ditto 2*s.* ditto from ditto.

— 15 do. ditto 2*s.* ditto from ditto.

The parish relief is not included in the total amount of earnings. The object of this table is to show that children in factories, instead of having their wages applied to their own use, are often burthened with the support of families; and it very often happens that such earnings are wasted by profligate parents, thereby rendering the children miserable, and causing hardships much greater than any that can arise from the nature of their employment.*

* From a pamphlet called Observations on the proposed Legislative Changes in Factory Labour Manchester (Bancks.) 1833.

4. SAVINGS BANK.—I could not ascertain how many of the factory workpeople had made deposits here; but the following Table will afford some approximative idea of the comparative providence of different conditions.

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CLASSIFICATION OF DEPOSITORS, from the Establishment of the Bank to 20th Nov. 1832.

	Male.	Female.	Total.
Tradesmen, shopkeepers, artificers, publicans, or their wives - - - - }	5,391	1,781	7,172
Persons employed in factories, warehouses, or as porters, &c. - - - - }	2,686	491	3,177
Domestic servants - - - -	625	3,113	3,738
Widows - - - -	—	506	506
Minors - - - -	1,225	1,075	2,300
Weavers - - - -	868	206	1,074
Labourers - - - -	500	—	500
Farmers - - - -	324	59	383
Other descriptions, not particularly specified -	408	855	1,263
	—	—	20,113
Friendly Societies - - - -	—	—	21
Charitable Societies - - - -	—	—	120
	—	—	20,254

HEALTH and DISEASE (principally of the Factory Classes).

1.—LETTER from Dr. E. CARBUTT, Physician to the Manchester Royal Infirmary, &c., to the Factory Commissioners.

Gentlemen,

3d May 1833.

I HAVE answered, to the best of my judgment, the several queries which you have done me the honour to submit to me; but I wish to be permitted to make a few observations upon matters not contained in those queries, more especially as to the gross exaggerations of medical witnesses, particularly those of London, on the subject of the diseases of cotton factories. These gentlemen, hardly any of whom have ever had an opportunity of seeing persons employed in cotton factories, do almost universally attribute to factory labour the production of scrofulous diseases. Now the fact is, that scrofula is almost unknown in cotton factories, although the climate of this town and neighbourhood is particularly cold and humid. In a very extensive examination which I and some other medical men made a few years ago, we found, to our surprise, that the cotton factories, instead of producing scrofula, are, in some sort, a kind of means of cure. The late Mr. Gavin Hamilton, who was for thirty-six years surgeon to our infirmary, and who previously to that had been surgeon in the Queen's Bays, said in my hearing, after examining the cotton factory, "Gad! we found the factories to be a specific for the scrofula." In one factory examined by Dr. Holme, and Mr. Scott, surgeon to the Carabineers, of 401 persons employed eight only were affected with scrofula, with no case of distortion of the spine or limbs. I myself, accompanied by respectable surgeons, examined several factories. In one, employing 504 individuals, we found scrofulous affections (generally light and constitutional), six; weak limbs, two; distorted spine before working in a factory, one. In another mill, employing 234, we found scrofulous affections of the neck, eyes, &c., five; slight distortions, four. In another, employing 337, we found scrofulous, four; slight distortion, one. In another mill,

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which employed 199, we found scrofulous affections, three; distortions, three; ulcerated legs, one.

This remarkable absence of scrofula, I presume, with perfect deference to the medical gentleman who is one of your number, to attribute to the dryness and warmth of the cotton factories, to the lightness of the work, and to the superior food and clothing which the superior wages of the workpeople enable them to obtain.

In addition to the above facts, I may mention, that during the sixteen years I have had the honour of being Physician to the Manchester Royal Infirmary, I have, nearly invariably, at the consultations previously to operation, to which the physicians are summoned as well as the surgeons, been in the habit of putting to the patient the question, "what trade are you of?" especially when the case was that of a distorted limb or joint. To which question the answer has almost never been, "work in a cotton factory," but almost constantly "a hand-loom weaver," or "a hatter," or some other trade.

I may add, that the poor people whom I visit from the infirmary very generally depend upon the labour of their children in cotton factories for making up the general earnings to as large a sum as will support the family, especially if the heads of the family be hand-loom weavers or fustian-cutters. With regard to Sir Robert Peel's assertion a few evenings ago, that the hand-loom weavers are mostly small farmers, nothing can be a greater mistake; they live, or rather they just keep life together, in the most miserable manner, in the cellars and garrets of the town, working sixteen or eighteen hours for the merest pittance.

In conclusion, I most respectfully crave permission to offer my humble advice that you, gentlemen, should visit the different factories without the slightest previous notice of your coming; and this I say, because I sincerely believe the men will be quite as likely to play tricks to deceive you as the masters. This they may do by keeping the windows closed previously to your arrival, ordering their children to come in their worst clothes, unwashed, &c., and by desiring the hands in the card-rooms to take care to kick up an uncommon dust, &c. &c.

Asking your excuse for having presumed to address you this letter, I beg leave to subscribe myself, most respectfully,

Gentlemen,
Your most obedient and most humble servant,
EDWARD CARBUTT, M. D.

His Majesty's Commissioners
for inquiring concerning Factories.

2.—SUMMARY of the HOME PATIENTS admitted under the care of Dr. Lyon at the Manchester Infirmary and Dispensary, during four years.

		1826.		1827.		1828.		1829.		TOTAL.	
		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Males	-	171	18	133	7	100	16	193	26	597	67
Females	-	219	20	192	6	140	7	318	27	869	60
TOTAL	-	390	38	325	13	240	23	511	53	1,466	127

ABSTRACT of the Numbers of the above Patients who were employed in Cotton Factories, including Power-Loom Mills.

		1826.		1827.		1828.		1829.		TOTAL.	
		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Males	-	6	—	15	1	12	1	23	4	56	6
Females	-	22	1	37	—	17	4	52	6	128	11
TOTAL	-	28	1	52	1	29	5	75	10	184	17

Tabular View of the principal DISEASES affecting the 184 Persons who had wrought in Factories.

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	MALES.		FEMALES.		
	Admitted.	Died.	Admitted.	Died.	
Diseases of the lungs and heart, acute and chronic - }	20	3	41	6	
Fevers* - - -	14	—	20	1	* Some of the fever cases were removed to the fever wards, and the result is not recorded in the register from which these tables are derived; three were cases of scarlatina.
Rheumatism, acute and sub-acute - - - }	4	—	3	—	
Ditto - chronic -	—	—	2	—	
Cynanche Tonsillaris -	3	—	3	—	
Dysentery† - -	3	1	10	1	† Dysentery prevailed chiefly in the years 1826 and 1827.
Affections of the head, acute and chronic - - }	1	—	8	1	
Dyspepsia - - -	2	—	15	—	
Enteritis - - -	—	—	2	1	
Peritonitis - -	1	1	—	—	
Diarrhœa chronica -	1	1	—	—	
Jaundice - - -	—	—	1	1	
Menorrhagia - -	—	—	2	—	
Amenorrhœa - - -	—	—	4	—	
	49	6	111	11	
Miscellaneous - -	7	—	17	—	
TOTAL - -	56	6	128	11	

AGES of the Patients employed in Factories.

	Males.		Females.		
	Admitted.	Died.	Admitted.	Died.	
Under 16 years - -	17	1	11	—	* Two of these were aged 67 and 65 respectively; the one who died was 53. Disease, chronic diarrhœa.
From 16 to 24 inclusive -	20	1	59	8	
From 25 to 30 - -	3	—	20	1	† Both 70 years of age; one engaged in batting cotton until the time of her illness; the other at an earlier period, and therefore not strictly entitled to be included in the list.
From 31 to 50 - -	12	3	36	2	
Above 50 - - -	4 *	1	2 †	—	
TOTAL - -	56	6	128	11	

TABLE of the Monthly Admissions, and of the Number of such Cases which proved fatal whilst under the Superintendence of Dr. Lyon.

	1826.				1827.				1828.				1829.				Total of both Sexes.	
	Males.		Females.		Males.		Females.		Males.		Females.		Males.		Females.		Admitted.	Died.
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.		
January -	37	5	38	6	10	—	10	—	3	1	5	—	14	4	28	3	145	19
February -	23	2	34	1	11	1	15	—	4	1	5	—	24	2	25	—	141	7
March -	14	2	19	1	11	—	18	—	13	—	10	—	14	2	43	3	142	8
April -	3	—	9	—	19	3	33	1	11	3	9	1	20	2	35	4	139	14
May -	6	1	8	1	25	—	24	3	2	—	4	—	6	—	22	1	97	6
June -	8	1	8	2	6	—	13	—	5	—	4	—	10	2	10	—	64	5
July -	6	2	8	1	7	—	17	1	3	—	4	—	16	4	16	3	77	11
August -	14	1	29	2	14	1	30	1	3	1	3	—	12	2	23	2	128	10
September -	22	1	24	3	13	—	17	—	3	—	11	2	10	1	21	—	121	7
October -	17	—	18	1	3	—	7	—	14	3	26	1	21	1	21	3	127	9
November -	11	3	14	2	8	1	4	—	28	5	32	1	20	3	30	5	147	20
December -	10	—	10	—	6	1	4	—	11	2	27	2	26	3	44	3	138	11
	171	18	219	20	133	7	192	6	100	16	140	7	193	26	318	27	1,466	127

In explanation of the above table it is necessary to state that the districts in which home-patients are visited are regularly changed at the latter end of March and September ; besides which, in 1826 there was a change in October, and in 1828 one in April. These changes will account for the disproportion between *admissions* and *deaths* in certain months, but do not affect the relative proportions between patients engaged in factories and those belonging to other classes of the population. Some of the districts also are larger than others, and more productive of patients ; but it does not appear necessary to specify them here.

E. L.

D. 3. 3.—The AGES, SEX, RECOVERIES, DEATHS, and DISEASES of 1,600* Patients, out of 2,630, visited by me at their own Residences during the last Five Years, as Physician to the Salford and Pendleton Royal Dispensary.

(The greater part of these cases are factory workpeople, hand-loom-weavers, and their children.)

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Ages under	Sex.		Deaths.		Diseases.	
	Males.	Females.	Males.	Females.		
4	52	49	10	11	Apoplexy - - 4	Brought forward - 59
8	90	71	7	5	Bronchitis, acute - - 6	Hydatids of Kidney - 1
12	41	42	3	4	Bronchitis, chronic - 12	Heart, disease of - 3
16	58	55	2	3	Croup - - - 5	Hydrocephalus - - 5
20	44	69	3	3	Croup - - - 5	Ileus - - - 1
25	66	75	2	1	Convulsions - - 3	Measles, sequela of - 6
30	56	59	3	4	Dropsy - - - 7	Marasmus † - - 7
35	43	81	4	2	Diarrhœa, chronic - 3	Phrenitis - - 4
40	49	63	4	2	Dysentery - - 3	Pneumonia - - 3
45	36	82	3	5	Enteritis - - - 3	Peritonitis, chronic - 2
50	34	61	5	4	Fever - - - 9	Phthisis ‡ - - 20
55	27	67	3	4	Hæmoptysis - - 1	Scarlatina m. - - 1
60	28	34	7	3	Hydrothorax - - 3	Variola § - - 7
65	24	49	2	3		
70	14	21	1	—		
80	15	39	4	2		
90	1	4	—	—		
100	1	—	—	—		
	679	921	63	56	Carried forward - 59	
	1,600		119			119

* The remainder (1,030) had not the age, or disease, or result attached to them ; the 1,600 therefore are not chosen, but are taken indiscriminately.

† The mortality amongst children under four years of is age very high ; I believe about fifty per cent. ; but they are mostly taken to some neighbouring druggist, and are not presented at the dispensary.

‡ Pulmonary affections form a large proportion of the cases which present themselves to my notice at the Salford Dispensary.

§ The lower classes are with difficulty persuaded to have their children vaccinated.

I would not speak positively, but I think about one third of my dispensary patients are employed in factories.

Mosley Street, Manchester, }
14th May 1833.

GEORGE SHAW, M.D.
Physician to the Salford and Pendleton
Royal Dispensary.

4.—CLASS of MEDICINES most used by the Factory Classes.

Mr. M^cWilliams, a chemist, whose shop is very much frequented by the factory classes, states that they make a very large use of purgative remedies; they are continually in the habit of purchasing such at his shop. He observes, that the medical gentlemen who attend them prescribe strengthening remedies to a great extent; in fact he thinks that the medicines sold to the factory classes may be said to consist principally of those two classes of medicines, namely, of purgatives, and of strengthening remedies, such as bark. I have confirmed this observation from other sources, and I find from very young women, that they take purgatives very frequently. Mr. M^cWilliams believes that the factory classes use purgative medicines in a far larger proportion than the other working classes of Manchester. These facts may serve to throw some light on the character of the constitution of the factory classes at Manchester.

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HOMICIDE AT MANCHESTER.

REPORT of the CORONER for the last Nine Months in his District of 450,000 Souls, distinguishing the Trades.

2 by Weavers *	-	-	-	-	} committed for trial.
1 — Butcher	-	-	-	-	
1 — Shoemaker	-	-	-	-	
1 — Tanner	-	-	-	-	
1 — Soldier	-	-	-	-	
1 — Cotton-spinner	-	-	-	-	
1 — Porter	-	-	-	-	
1 — Labourer	-	-	-	-	
1 — Coachman	-	-	-	-	
1 — Engineer	-	-	-	-	
1 — Bricklayer's labourer	-	-	-	-	
1 — Hatter †	-	-	-	-	
1 — not known	-	-	-	-	

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1 by Soldier	-	-	-	-	} excusable homicide.
1 — Housewife	-	-	-	-	
1 — House-servant	-	-	-	-	
9 — Carters	-	-	-	-	
4 — Coachman	-	-	-	-	
1 — Collier	-	-	-	-	
1 — Porter	-	-	-	-	
1 — Fustian-cutter	-	-	-	-	
1 — Mechanic	-	-	-	-	

20

Number of cases in which infants have been found dead, presumed to be murdered, but not known, 7.

* One mother destroyed her child. † Destroyed his child.

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HOSPITALS.

1.—ROYAL INFIRMARY.

PATIENTS ADMITTED AND DISCHARGED at the INFIRMARY and DISPENSARY, from 25th June 1831 to 24th June 1832 inclusive.

ADMITTED.		DISCHARGED.																		
		In the House and on the Books, June 24th, 1831.	Total.	Cured.	Relieved.	Made In-patients.	Made Out-patients.	Made Home-patients.	At own Request.	As improper Cases.	Irregular.	Incurable.	More proper for the House of Recovery.	More proper for a Work-house.	Dead.	Medical made surgical, and made medical.	Inoculated for the Cow-pox.	Removed.	In the House and on the Books, June 24th, 1832.	Total.
In patients	-	1,784	1,919	696	47	—	769	15	37	9	42	4	28	9	128	14	—	—	121	1,919
Out-patients	-	14,166	15,814	11,345	1,724	139	—	335	64	61	75	5	4	10	118	32	339	—	1,563	15,814
Home-patients	-	4,529	4,887	2,969	80	52	415	—	50	21	39	10	323	91	360	126	—	73	278	4,887
Out-district Home-patients	-	870	984	597	26	10	36	—	5	18	8	—	80	23	44	—	—	12	125	984
		21,349	23,604	15,607	1,877	201	1,220	350	156	109	164	19	435	133	650	172	339	85	2,087	23,604

Fever-ward patients supplied with medicines from the Infirmary

Total number of patients admitted last year at the Infirmary and Dispensary from the 25th June 1831 to the 24th June 1832 inclusive (of which number 3,922 were Accidents) 21,349 774

TOTAL NUMBER OF PATIENTS ADMITTED AND DISCHARGED since the first Opening of the Infirmary in the Year 1752.

ADMITTED.		DISCHARGED.																
		Cured.	Relieved.	Made In-patients.	Made Out-patients.	Made Home-patients.	At own Request.	As improper Cases.	Irregular.	Incurable.	More proper for the House of Recovery.	More proper for a Work-house.	Dead.	Medical made surgical, and made medical.	Inoculated for the Cow-pox.	Removed.	In the House and on the Books, June 24th, 1832.	Total.
In-patients	-	30,230	4,177	—	25,142	397	1,117	110	1,545	437	142	117	3,321	63	—	—	121	66,919
Out-patients	-	219,262	20,474	5,169	—	7,889	3,483	151	13,371	481	7,227	10	6,358	32	38,190	—	1,563	323,660
Home-patients	-	80,020	3,670	1,045	14,691	—	942	135	1,211	585	486	176	9,914	1,524	—	1,390	278	116,067
Out-district Home-patients	-	8,894	689	106	1,190	—	276	18	196	5	157	42	793	—	—	283	125	12,774
		338,406	29,010	6,320	41,023	8,286	5,818	414	16,323	1,508	8,012	345	20,386	1,619	38,190	1,673	2,087	519,420

In the following Table all patients not distinctly registered as being in a factory, or not being in a factory, are excluded, consequently it must not be supposed that all the patients received into the Infirmary in 1832 are here included; 597 patients are omitted in this list, who belong to mixed or doubtful classes, that is, are persons who may work at their own dwellings, or in factories, who sometimes do one thing and sometimes the other. They are registered under the terms, weavers, reelers, winders, cotton-batters, &c. On consulting several intelligent persons, I find that one half of this class, that is, one half of the 597 doubtful cases, may be properly added to the side of the factory class, and one half to the non-factory class, so that the proportions indicated below will remain undisturbed.

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TOTAL NUMBER of PATIENTS admitted into the MANCHESTER HOSPITAL during the
Year 1832.

Ages.			Total Number admitted.		Of these died.	
			Males.	Females.	Males.	Females.
Under	15	-	155	82	14	10
15	to	19	137	81	11	2
20	—	24	145	97	7	2
25	—	29	108	88	4	4
30	—	34	120	53	9	3
35	—	39	92	34	6	2
40	—	44	122	47	6	4
45	—	49	71	32	4	4
50	—	54	52	2	4	—
55	—	59	41	9	1	—
60	—	64	35	9	2	2
65	—	69	24	17	1	1
70	and above	-	27	5	3	2
TOTAL			1,129	575	72	36
Of whom employed in } factories - - }			126	82	13	7
			208		20	
Not employed in fac- } tories - - }			634	204	51	12
			838		63	

TOTAL NUMBER of PATIENTS admitted into the MANCHESTER ROYAL INFIRMARY during
the Year 1832, who have been employed in Factories.

Ages.			Total Number admitted.		Of these died.		Were serious Accidents.		Of these died.	
			Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Under	15	-	32	8	3	-	20	6	1	3
15	to	19	30	17	2	1	16	4	4	—
20	—	24	15	23	2	1	4	3	—	—
25	—	29	11	16	1	1	3	—	—	—
30	—	34	10	7	-	1	2	—	—	—
35	—	39	8	2	-	-	1	—	—	—
40	—	44	7	3	—	—	—	—	—	—
45	—	49	4	4	-	-	1	—	—	—
50	—	54	3	—	—	—	—	—	—	—
55	—	59	2	1	—	—	—	—	—	—
60	—	64	2	1	—	—	—	—	—	—
65	—	69	1	—	—	—	—	—	—	—
70	and above	-	1	—	—	—	—	—	—	—
			126	82	8	4	46	14	5	3

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TOTAL NUMBER of PATIENTS admitted into the MANCHESTER ROYAL INFIRMARY during the Year 1832, who have not been employed in Factories.

Ages				Total Number admitted.		Of whom have died.	
				Males.	Females.	Males.	Females.
Under	15	-		54	19	6	2
15	to 19	-		62	30	3	—
20	— 24	-		89	30	5	1
25	— 29	-		62	31	3	1
30	— 34	-		80	21	6	2
35	— 39	-		55	14	5	1
40	— 44	-		78	21	5	1
45	— 49	-		49	10	4	1
50	— 54	-		29	9	2	—
55	— 59	-		26	3	4	—
60	— 64	-		22	3	2	2
65	— 69	-		10	11	4	—
70	and above	-		18	2	2	1
				634	204	51	12

TOTAL NUMBER of PATIENTS admitted into the MANCHESTER ROYAL INFIRMARY during the Year 1832, whose Occupations whether or not in Factories is doubtful in consequence of the vague description given by the Recommenders, &c.

Ages.				Doubtful Cases.		Of whom have died.	
				Males.	Females.	Males.	Females.
Under	15	-		49	49	4	5
15	to 19	-		28	29	2	1
20	— 24	-		37	41	—	—
25	— 29	-		33	41	1	2
30	— 34	-		29	25	3	—
35	— 39	-		29	17	1	1
40	— 44	-		37	23	1	3
45	— 49	-		17	17	-	3
50	— 54	-		20	12	2	—
55	— 59	-		13	5	—	—
60	— 64	-		11	5	—	—
65	— 69	-		13	6	-	1
70	and above	-		8	3	1	1
				324	273	15	17

This list consists of persons employed in the manufacturing of cotton, silk, &c., who may follow their occupation either at home or in factories, as weavers*, reelers, winders, cotton-batters, &c. &c.

2.—SALFORD and PENDLETON ROYAL DISPENSARY.

For an excellent table of the diseases, with the age, sex, and result of each case, see the table kindly communicated to me by Dr. Shaw, the zealous physician of that charity, under the head of Health and Disease.

3.—HOUSE of RECOVERY (or Fever Hospital).

The total number of patients admitted during the last twelve months amounted to 753,—336 males and 417 females; of whom 88 died, 632 were discharged cured, and 34 remain to be accounted for in the next year's report.

* These weavers are sometimes hand-loom weavers and sometimes power-loom weavers.

The following Table shows the Monthly Rate of Admissions and Deaths.

1831 and 1832.				Admitted.	Died.	Average.
June	-	-	-	47	1	1 in 47
July	-	-	-	49	5	1 in 9 4-9
August	-	-	-	59	6	1 in 9 5-9
September	-	-	-	107	12	1 in 8 11-8
October	-	-	-	96	9	1 in 10 6-10
November	-	-	-	78	15	1 in 5 3-5
December	-	-	-	93	13	1 in 7 2-7
January	-	-	-	69	10	1 in 6 9-6
February	-	-	-	31	5	1 in 6 1-6
March	-	-	-	41	4	1 in 10 1-10
April	-	-	-	40	4	1 in 10
May	-	-	-	43	4	1 in 10 3-10
TOTAL				753	88	1 in 8 49-88

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Fourteen cases of small-pox were admitted; and three proved fatal. Of scarlet fever, eighteen cases were admitted, and three terminated unfavourably. Of measles, only one; and of chicken-pox two, which were discharged cured.

With the exception of the year 1802, a greater number of patients has been received into the house during the past year than since its first establishment in 1797. From September to the end of December, including four months, the admissions were 374; and at one time the wards were so full that several applicants were refused from want of room.

The rate of mortality has been high; but this has partly arisen from the severe type of fever which has, more or less, prevailed during the last year, being accompanied with an inflamed, and in many instances ulcerated condition of the lining membrane of the bowels. It is proper to state, that ten patients died within thirty hours of their admission, and not less than twenty within seventy-two hours, a circumstance which satisfactorily proves, that the disease had so far advanced as to render the remedial means employed altogether unavailing.

During the last five months (viz. from 1st of December 1832 to 30th of April 1833) 111 patients have been admitted; and of these, 21 were factory workpeople, or rather more than one fifth of the whole number. The ages of these factory patients were as follow; 23, 18, 12, 23, 22, 16, 14, 19, 29, 22, 20, 14, 10, (four sisters with small-pox) 21, 22, 13, 14, 11, and only one of forty years of age. About a year ago the apothecary, the matron, and a nurse died at the same period, of fever.

4.—THE LOCK HOSPITAL.

This institution for venereal cases is not in a flourishing state. At present there are only four patients in the house; but this small number does not arise from any deficiency of applications for admission, but of funds. It can accommodate 10 or 12. The out-patients are numerous. The patients are recommended by the subscribers, and by the surgeons. A main object, which appears to have been kept in view throughout, was the possibility of reforming female patients, by subsequently transferring them to the Penitentiary. For the last five or six years only female in-patients have accordingly been received. Syphilis is stated to wear an extremely mild form here. The total number of patients treated in 1830 was 612; but in the following year, 1831, it increased to 748. Several of the male patients are vagrants lately arrived in Manchester, and issuing from common lodging houses. These are dens of iniquity which exist on a great scale at Manchester; in a small dark room, sometimes in a cellar, a number of persons varying from five to fifteen, perhaps, they afford the misaccommodation of lodging in common.

Of the 748 patients treated in 1831, the sexes afford a nearly equal share. Prostitutes were the most numerous class: their amount was 169. Then comes a large class who are merely stated in the register as married women, and of course it is impossible to ascertain to which condition they belong. Nearly 100 of the whole are distinctly registered as belonging to the factory classes, and nearly another 100 are marked by the indefinite character of weavers, without any discrimination as to their being hand-loom weavers, who work in their own dwellings, or power-loom weavers, who work in factories. About twenty of the whole are female servants. The tailors are about thirty, the joiners fourteen, and the bricklayers about seven. The factory classes would probably, on sifting the whole, yield a fifth part of the total amount. Some of the female patients come directly from the factories, and return to them when they are cured. In 1823, of the in-patients fifteen were males, sixty-six females.

The average expence per head is little more than 8s., including rent, salaries, house-keeping, medicines, wear and tear, and incidental expenses. The institution is, however, 100% in debt.

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5.—THE LUNATIC ASYLUM.

STATEMENT of the PATIENTS since the last Year's Report.

ADMITTED.			DISCHARGED.						
Admitted.	In the House 24th June 1832.	Total.	Cured.	Relieved.	At Friends Request.	Dead.	Incurable.	In the House 24th June 1832.	Total.
17	60	77	5	5	9	5	—	53	77
Since the first opening of the Establishment in the year 1766.									
2,761			1,053	377	889	381	8	53	2,761

Not one factory workman is at present an inmate of the Lunatic Asylum.

6.—INSTITUTION for curing DISEASES of the EYE.

The following is an Abstract of the Seventeenth Report.

Admitted from the 1st of January 1831 to the 1st of January 1832	-	1,284
Remaining on the books upon making up the last report	-	250
Total	-	1,534
Discharged, cured and relieved	-	1,230
Incurable	-	24
Absented themselves	-	40
Remain on the books	-	240
Total	-	1,534

DISEASES.

Ophthalmia, Acute and Chronic	-	343	Conjunctiva, Fungous tumour of	-	2
Ditto with Hypopyon	-	4	Accidents	-	135
Ditto Strumous	-	60	Myopia	-	2
Ditto Pustular	-	63	Lachrymal Sac, Abscess of	-	5
Ditto Purulent	-	117	Fistular Lachrymalis	-	10
Ditto Catarrhal	-	13	Fungus Hæmatodes	-	2
Ditto Porriginous	-	3	Carcinoma	-	1
Corneitis	-	3	Amaurosis	-	30
Staphyloma	-	19	Iritis, Acute, Chronic, and Syphilitic	-	50
Choroiditis	-	1	Cornea, Opacities of	-	190
Pterygium	-	5	Ditto, Ulcers of	-	72
Tinea	-	45	Ditto - ditto, with Prolapsus of Iris	-	2
Lippitudo	-	23	Ditto, Abscess of	-	1
Eyelids, Granular	-	3	Ditto, Sloughy	-	11
Ditto, Abscess of	-	4	Restored to sight by the operations for	}	32
Ditto, Ulceration of	-	1	Cataract and Artificial Pupil		
Ditto, Tumor of	-	9			
Ditto, Paralysis of	-	2	Total	-	1,284
Entropion	-	4			
Sclerotitis	-	17			

No register is kept of the trades here, so that no distinct idea can be formed of the proportion of patients who come from the factories, but I am informed that it is a large one.

7.—THE MANCHESTER LYING-IN-HOSPITAL and CHARITY for the Delivery of poor Married Women at their own Habitations.

100,000 cases have been relieved here since 1790; and the following is a Report of the patients admitted and discharged from 4th May 1831 to 2d May 1832.

HOME PATIENTS.		OUT-PATIENTS.	
Remaining on the books, 4th May 1831	348	Remaining on the books, 4th May 1831	13
Admitted since	4,451	Admitted since	69
	<u>4,799</u>		<u>82</u>
Wives of Soldiers	16	Cured	54
Widows	15	Remaining on the books	28
Apprentices Wives	1		<u>82</u>
Other objects	4,767		
	<u>4,799</u>		
Delivered and discharged, amongst whom were 86 twin cases	4,500	Inoculated for the Cow-pox, from 4th May 1831 to 2d May 1832	493
Remaining on the books	299	Total of patients admitted from 4th May 1831 to 2d May 1832	5,013
	<u>4,799</u>		

I have not been able to procure any account of the number of deaths, nor any other particulars, except what are contained in Mr. Robertson's Answers, which may be found under the head of *Prolificness*. No register of the deaths is preserved; this is owing to the far greater part of the patients being delivered by midwives. It is not an hospital, in fact, but rather partakes of the character of a dispensary.

Mr. Robertson, the eminent surgeon accoucheur attached to the institution, has proved in detail that "taking the population of Manchester at 227,000, considerably more than one half of the whole have their offspring brought into the world by the aid of a public charity.

(See Mr. Robertson's general remarks on the health of English Manufacturers. London 1831. Ridgway.)

INFANTICIDE.

REPORT of the CORONER for the last Nine Months* in a District of 450,000 Souls.

Number of cases in which infants have been found dead, presumed to be }
murdered, but not known, - - - - - } 7

Only two cases of infanticide have been brought home to the culprits; one was the wife of a weaver.

INTEMPERANCE.

1.—EXTRACT from REPORT of the TEMPERANCE SOCIETY of MANCHESTER (1832).

TOWN of MANCHESTER:—Whereas there is reason to believe that a considerable proportion of the drunkenness which usually prevails in Manchester and the neighbourhood at Christmas, and the consequent disorderly acts, breaches of the peace, as well as accidents and deaths, are attributable to the practice entailed upon shopkeepers and other tradesmen, of giving drams and intoxicating liquors to their customers; and, it being also found that a serious impulse is thereby periodically given to habits of intoxication among the working classes, producing the most demoralizing effects, and an alarming annual increase of poverty, disease, and crime; we feel it our duty, from a regard for the preservation of the peace, and the best interests of our fellow-townsmen of all classes, urgently to recommend all shopkeepers, tradesmen, and others to discontinue and discountenance the practice referred to, recommending the substitution of some useful article, as an equivalent, in dispensing Christmas-boxes and New-year's-gifts.

(Signed)

JAMES BURT, Boroughreeve
THOMAS BIRTLES,
BENJAMIN BRAIDLEY, } Constables.

From this resulted a meeting of tradesmen and shopkeepers, convened by public notice, for the purpose of taking into consideration the most effectual method of complying with the recommendation of our respected boroughreeve and constables.

* He has only been in office nine months: the documents previous to his entry are not in proper order.

Manchester and
Salford.
—
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to
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2.—FURTHER EXTRACT from REPORT of the TEMPERANCE SOCIETY of MANCHESTER (1832).

While every Christmas beheld an awful addition to the number of those who were cut off suddenly, and sent to their account,—this year, through the divine blessing it is hoped on the efforts of this Society, the destroyer's sword has been visibly arrested. The Coroner's returns have usually presented an increase of deaths by intemperance in the Christmas quarter. In 1829-30, that quarter was in this respect fatal in the proportion of 28 to 8, compared with the other quarters.—In 1830-31, the deaths by intoxication, though frightfully increased during the entire year, were actually less in the Christmas quarter than during any of the three preceding ones of that intemperate year.

3.—The CORONER'S REPORT of DEATHS from Drinking during the last Nine Months (1833).

Number of cases in which death has been caused by excessive drinking, nine; namely, one female, wife of a poor man; one female, a cook; one female, not identified; one female, wife of overlooker in a cotton factory; one man, a porter, who drank for a wager; one man, a surgeon; one man, not in business; one man, a saddler; one man, a bricksetter.

4.—MANCHESTER COLLECTION.

The two following important documents were communicated to us by the collector of excise. The Manchester collection includes several places in the neighbourhood, of which Stockport is one. It embraces altogether 460,447 souls.

LICENCES granted in the Year ended the 5th April 1833.

Quarter ended.	Public Houses.		Licensed under the 1st Wil. 4. Beer only.
	Licensed for Sale of Beer, Ale, and Spirits.	Licensed for Beer and Ale only.	
5th July, 1832 -	2	—	248
10th October, do.	2	1	224
5th January, 1833	1,249	27	956
5th April, do. -	6	1	428
	1,259	29	1,856

QUANTITY of SPIRITS of each DENOMINATION consumed in the Quarter ended the 5th April 1833.

Quarter ending	FOREIGN SPIRITS.				BRITISH SPIRITS.		
	Brandy.	Rum.	Geneva.	Rum Shrub.	Whiskey.	Brandy.	Gin.
	Gals.	Gals.	Gals.	Gals.	Gals.	Gals.	Gals.
5th April 1833.	15,692	63,480	84	126	17,283	2,530	61,448

(Signed) JAMES THOMPSON, Collector of Excise.

5.—OBSERVATIONS respecting the USE of OPIUM.

The use of opium has been stated to exist to a considerable extent in some of our manufacturing towns. I cannot discover, however, that this practice at all prevails in Manchester. The medical profession are not aware of its existence; and Mr. M'Williams, a druggist, who is much employed by the factory classes, declares that he has some customers, in other classes of life, who purchase large quantities of opium from his shop; but that he has never known an instance in which a factory workman procured that article from him as an article of luxury.

LONGEVITY of FACTORY CLASSES.

To His Majesty's Commissioners, &c. &c.

GENTLEMEN,

Having had occasion to apply at the mill of Mr. M'Connel, respecting the ages of some of his people, I was so much struck with some of the details, to which I was most liberally allowed to have access, that I was induced to throw them into a tabular form, and in this shape to append them, by way of answer, to the three first questions of the circular. I had originally intended to include in the table those persons only who were above the age of fifty; but, on examination, I found the periods of service of some of the younger hands, compared

compared with their respective ages, so remarkable, that I thought their cases as deserving of notice as those of the older hands. These stand first in the list. It is to be borne in mind, moreover, that all the particulars contained in the table are furnished exclusively by one mill. I have purposely omitted every name and every fact that might be derived from other establishments in the town, from several of which details equally striking might be obtained. With respect also to the persons no longer employed in the factory, the list is necessarily far from complete. It would evidently be impossible to render it so. I have given the names of such persons only as I could procure tolerable accurate information of.

The column marked "Years in Mill" refers merely to the number of years each individual has worked in Mr. M'Connel's mill, and not to the time such individual has spent in cotton factories.

I am, Gentlemen,

Your obedient servant,

Piccadilly, 17th May 1833.

C. PHILLIPS.

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LIST of PERSONS now working, or that have formerly worked, in Mr. M'CONNEL'S MILL
at Manchester, communicated by Dr. C. PHILLIPS.

NOW WORKING.			
NAME.	Age.	Years worked in Mill.	OBSERVATIONS.
John Widhouse - -	28	20	
John Gardner - -	31	23	
Charles Gardner - -	37	31	
Anne Dean - - -	47	26	
Charles Bradley - -	47	25	
Thomas Ryley - - -	48	20	
Jane Pattison - - -	48	27	
Robert Waterhouse - -	49	26	
Mary Jackson - - -	48	23	
Jane Davies - - -	49	39	
Ch. Kirk - - -	49	33	
John Richardson - - -	49	30	
John Smith - - -	49	16	
John Taylor - - -	49	30	
Cath. Waugh - - -	49	29	
Mary Simms - - -	50	30	
Sarah Hocknell - - -	50	26	
Jas. Burrows - - -	50	14	
J. Johnson - - -	50	30½	
Elizabeth Connor - -	50	17	
Richard Gleaves - - -	51	10	
Robert Greenwood - -	52	11	
W. Maddox - - -	54	11½	
W. Johnson - - -	54	37	
Mary Park - - -	55	38	
T. Griffiths - - -	55	15	
Adam Bowker - - -	55	26	
Wm. Cardan - - -	57	26	
Wm. Killer - - -	57	35	
Hannah Auckland - -	57	2	
Jos. Pearson - - -	57	2	
Edward Hoyle - - -	58	5	- - - 31 years at Kennedy's.
Harrison Harden - - -	59½	40	
John Richardson - - -	59	30	
W. Prentice - - -	61	4	
Thos. Scott - - -	63	33	
Jas. Wood - - -	64	32	
J. Field - - -	66	5	
Jos. Marsden - - -	67	38	
Sarah Carruthers - - -	68	7	
Hannah Burchnall - -	68	9	

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THAT HAVE FORMERLY WORKED.

LIVING.

NAME.	Age.	Years in Mill.	OBSERVATIONS.
Jas. Lorton - - -	51	18	- - Left mill one month ago.
Jas. Hoyle - - -	63	31	
Thos. Burrows - - -	55	35	
Andrew Simms - - -	60	35	
Jas. Smith - - -	61	20	
Geo. Ashworth - - -	64	18	- - 42 years in cotton-mills.
James Thomas - - -	65	30	
Samuel Cockcroft - - -	66	20	
Thomas Thompson - - -	67	25	
James Potter - - -	69	25	
John Welton - - -	73	26	- - James Potter has been 58 years in cotton factories. He worked for Arkwright; and in the night, not long ago, he lost his left arm, in consequence of an accident amongst the machinery. He is now quite well, and lives in Derbyshire. His complete recovery from this accident, taken in conjunction with his advanced age, clearly indicates that his health had not suffered from factory labour.
John Wilson - - -	(About) 64	16	
James Vickers - - -	(Above) 60	—	
John Grunhalgh - - -	(Above) 60	—	
William Drabble - - -	(About) 55	(About) 10	
Edward Williams - - -	(About) 60	—	
John Hindle - - -	60	20	
John Cockett - - -	64	—	
Thomas White - - -	56	25	
David M'Olive - - -	60	10 or 12	
Matthew Roebuck - - -	64	12	
William Roebuck - - -	62	20	
John Edge - - -	(About) 55	17	
George Hampson - - -	55	—	
Thomas Welsh - - -	60	10 or 12	
George Fyfield - - -	55	10 or 12	
John Miller - - -	51 or 52	20	
Thomas Powell - - -	58	—	- was 58 two years ago; not heard of since.
George Johnson - - -	50	—	- - eight or ten years in mill.
John Haigh - - -	56	15	- - Above 60 when heard of last year.
James Hark - - -	60	20	
Richard Jones - - -	(About) 60	15 or 20	
James Langshaw - - -	52	20	
Samuel Brickill - - -	56 or 57	25	
Isaac Burchnall - - -	74	31 or 32	- - His wife, aged 68, is now working in the mill.
DEAD.			
Jonathan Holme - - -	66	27	- - Worked in the mill up to their last illness and death.
William Scott - - -	66	30	
Henry Topping - - -	68	36	
Abraham Baker - - -	71	28	
John Taylor - - -	72	28	
John Taylor - - -	73	10	
John Hocknell - - -	60	18	
John Lunt - - -	80	25	- - Died last week.
George Thornhill - - -	(About) 60	12 or 14	
James Rhodes - - -	(Near) 70	—	- - Died last summer.

10th May 1833.

MORTALITY.

The Census of 1821 made the annual mortality of Manchester only 1 in 74; but on investigation it appears to be more probably 1 in 45, according to Mr. Robertson, or 1 in 35, according to Dr. Kay.

The following Table contains a classification of the ages of one thousand persons buried in Manchester, Liverpool, and London, in one year. The Manchester list is taken from the register of the collegiate church for 1830 (the latest we could obtain); and those of Liverpool and London

London from their respective bills of mortality for 1831. In all cases fractions are omitted.

Manchester and Salford.

Appendix to Dr. Hawkins's Reports.

Age.		Manchester.	Liverpool.	London.
Under 2 years	- -	424	362	308
2 years and under 5 years		117	162	104
5	10	46	46	40
10	20	35	39	36
20	30	63	72	65
30	40	74	68	77
40	50	60	59	85
50	60	62	54	85
60	70	52	61	88
70	80	43	45	70
80 and upwards	- -	20	27	36

The above table was formed by Mr. Waldie, editor of the Manchester Courier, who also very kindly communicated the three following Tables. I can give no account of the manner in which they have been compiled.

1.—BURIALS at the COLLEGIATE CHURCH, MANCHESTER.

AGE.	1821.			1830.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 2 years	255	177	432	250	221	471
2 years and under 5 years	69	54	123	66	64	130
5	34	21	55	33	18	51
10	31	14	45	18	21	39
20	26	30	56	26	44	70
30	28	30	58	39	44	83
40	37	38	75	30	37	67
50	37	24	61	44	25	69
60	26	25	51	38	20	58
70	19	24	43	19	29	48
80 and upwards	10	15	25	9	14	23
Total	572	452	1,024	572	537	1,109

2.—BURIALS at the COLLEGIATE CHURCH, MANCHESTER, 1821.

Age.	Males.	Females.	Total.	Age.	Males.	Females.	Total.	Age.	Males.	Females.	Total.
Under 1	186	126	312	27	1	3	4	54	1	1	2
Under 2	69	51	120	28	3	6	9	55	4	1	5
2	40	29	69	29	1	3	4	56	5	3	8
3	17	17	34	30	5	1	6	57	2	3	5
4	12	8	20	31	3	4	7	58	4	5	9
5	10	11	21	32	2	2	4	59	3	—	3
6	7	6	13	33	1	2	3	60	3	7	10
7	6	—	6	34	3	1	4	61	2	2	4
8	5	2	7	35	4	6	10	62	4	3	7
9	6	2	8	36	2	4	6	63	1	5	6
10	2	2	4	37	3	2	5	64	4	1	5
11	2	1	3	38	3	5	8	65	1	—	1
12	—	3	3	39	2	3	5	66	3	1	4
13	4	1	5	40	8	6	14	67	4	—	4
14	5	2	7	41	2	4	6	68	2	2	4
15	5	2	7	42	4	3	7	69	2	4	6
16	3	—	3	43	2	5	7	70	1	6	7
17	5	1	6	44	3	4	7	71	4	14	18
18	4	2	6	45	7	4	11	to			
19	1	—	1	46	—	4	4	75			
20	6	1	7	47	3	1	4	76	15	11	26
21	—	2	2	48	6	6	12	to			
22	4	4	8	49	2	1	3	80			
23	6	1	7	50	8	5	13	81	8	8	16
24	1	5	6	51	5	1	6	to			
25	—	1	1	52	3	2	5	90			
26	4	4	8	53	2	3	5	103	1	—	1

3.—NUMBER of PERSONS INTERRED in DISSENTERS' BURIAL GROUNDS, MANCHESTER.

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	1821.	1830.
Quakers - - - - -	13	20
Platt (Unitarian) - - - - -	3	5
Christ Church, Salford - - - - -	294	140
New Jerusalem, Salford - - - - -	620	428
Ditto Manchester - - - - -	112	54
Christ Church, Hulme - - - - -	324	197
Every Street, Ancoats - - - - -	—	399
Bridgwater Street Chapel, Manchester - - - - -	29	51
St. Austin's, Catholic - - - - -	11	577
Mulberry Street, Catholic - - - - -	130	49
Grosvenor Street, Piccadilly (Independent) - - - - -	15	7
Cross Street, Unitarian - - - - -	13	5
Greengate, ditto (Salford) - - - - -	—	3
Gorton, ditto - - - - -	4	13
Crumpsall, Methodist - - - - -	111	261
Irwell Street, Salford, General Cemetery - - - - -	—	544
Rusholme Road, ditto - - - - -	46	1,630
Total - - - - -	1,725	4,383

POOR AND WORK HOUSE, MANCHESTER.

1.—STATE of the POORHOUSE during the year ending 25th of March 1832.

	Men.	Women.	Boys.	Girls.	Total.
Weavers and Winders - - - - -	10	2	1	—	13
Gardeners, Joiners, and Labourers - - - - -	29	—	1	—	30
Nurses, and Servants in the Kitchen - - - - -	14	30	2	2	48
Paid for by Out-Townships and Fathers of Illegitimate Children - - - - -	8	17	9	6	40
Employed at Churchwardens' Offices - - - - -	3	1	—	—	4
Blind, Lame, and subject to Fits - - - - -	16	19	3	4	42
On the Doctor's List - - - - -	55	76	7	5	143
Lunatics and Idiots - - - - -	10	12	3	—	25
Infirm, from 20 to 40 years of age - - - - -	18	30	—	—	48
Ditto, from 40 to 60 do. - - - - -	12	29	—	—	41
Ditto, from 60 to 80 do. - - - - -	30	57	—	—	87
Children, 6 years of age and under - - - - -	—	—	8	7	15
Ditto, 6 years to 9 - - - - -	—	—	30	27	57
Ditto, 9 years to 14 - - - - -	—	—	9	11	20
	205	273	73	62	613

Average Weekly Number in the House throughout the year - - - 564

Average Weekly Expence per head - - - 2s. 2½d.

Ditto do. do. for clothing - 0s. 6½d.

2.—NUMBER of PERSONS now in the Workhouse who have formerly been employed in Cotton Mills; and NUMBER of CHILDREN now in the Workhouse who are the Offspring of Parents working in Cotton Mills.

	Total Number in the House on the 1st May 1833.	Children, the Offspring of Parents working in Cotton Mills. Under 10 years.	Age of Persons that have been employed in Cotton Mills, and now in the Manchester Poorhouse.						Total.
			20.	30.	40.	50.	60.	70.	
Men - - - - -	211	—	2	4	2	2	3	3	16
Women - - - - -	295	—	9	9	7	3	3	4	35
Boys - - - - -	95	6	—	—	—	—	—	—	6
Girls - - - - -	74	7	—	—	—	—	—	—	7
	675	—	—	—	—	—	—	—	64

Manchester Poorhouse }
2d May 1833WM. ROBINSON,
Governor.

3.—A COMPARATIVE STATEMENT of IRISH CASES relieved Weekly at the following Townships.

Manchester and Salford.

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	Population in 1821.	Cases relieved, 1827	Cases relieved, 1831.
Manchester - - -	108,017	264	554
Stockport - - -	21,726	9	5
Macclesfield - - -	17,746	0	0
Warrington - - -	13,570	6	6
Oldham - - -	21,662	1	0
Spotland - - -	20,000	4	1
Wigan - - -	17,716	6	Sick cases 7
Ashton-under-Line - -	9,222	1	20
Great Bolton - - -	21,000	46	20
Bury - - -	10,583	0	Sick case 1
	153,225	73	60

4.—COMPARATIVE STATEMENT of MANCHESTER CASES and IRISH CASES.

	1827.	1831.	Expence.
Manchester (one week's cases)	1,821	2,022	£ s. d. 264 12 9
Irish - - - (ditto) -	264	554	64 9 0

5.—REMOVALS made by the OVERSEERS of the Poor for the Township of MANCHESTER from 1st January 1830 to 31st December 1832, being a period of three years.

Year.	Removal Orders.	Families of	
		Adults.	Children.
1830	429	554	487
1831	497	644	489
1832	422	524	445
	1,348	1,722	1,421

Women pregnant of Illegitimate Children included in the above.

Year.	Number.
1830 - - -	105
1831 - - -	147
1832 - - -	140
Total	392

6.—PASSES to IRELAND, removing Persons chargeable to the Township of MANCHESTER, during the same period as above.

Year.	Passes.	Families of	
		Adults.	Children.
1830	219	259	226
1831	244	291	235
1832	228	269	220
	691	819	681

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Women pregnant of Illegitimate Children, included in the above.

Year.	Number.
1830 - - -	36
1831 - - -	36
1832 - - -	47

Total 119

7.—PASSES to SCOTLAND, removing Persons chargeable to the Township of MANCHESTER, during the same period as above.

Year.	Passes.	Families of	
		Adults.	Children.
1830	3	3	9
1831	1	1	0
1832	4	4	0
	8	8	9

Women pregnant of Illegitimate Children included in the above, say 3.

16th May 1833.

N. GARDINE,
Directing Overseer.

PROLIFICNESS.

The general opinion of medical men, and the accidental facts gleaned, tend to affirm that the factory marriages are equally prolific as those in other corresponding classes of life. Mr. Robertson took 160 cases from the Lying-in Charity of Manchester, without making any selection, and he found that those 160 women, whose average duration of marriage had been about twenty years, had borne 686 children, or an average of four and a quarter each. Of 10,000 pregnant women in the same charity, 436 were upwards of forty years of age, and of these 51 had attained their forty-sixth year or upwards.

It is difficult to ascertain these points from the factory women themselves, as I myself, and some medical friends resident in Manchester, experienced.

PROSTITUTION AND PENITENTIARY.

Mr. Shawcross, one of the chief officers of the police of Manchester, has promised me ample details on brothels, receiving-houses, flash-houses, and prostitutes, but they have not yet reached me. (June 17.)

THE FEMALE PENITENTIARY.

The funds of this Institution are at present much on the decline; many candidates for admission are consequently obliged to be rejected.

From the commencement of this Institution in 1822 to June 1831,

The number admitted - - -	113	Restored to their friends - - -	29
		Placed in service - - -	15
		Sent to the workhouse - - -	3
		Left without permission - - -	14
		Dismissed - - -	13
		Dead - - -	3
		Left at their own request - - -	19
		Remain in the house - - -	17
	113		113

Mrs. Griffin, the matron of the Penitentiary, has favoured me with an account of the fifty young women who have been admitted from July 1829 to May 1833. The annexed table describes the age at which each individual was admitted, the number of years or of months during which she has been addicted to dissolute habits, her own occupation at the time of her seduction, and the business of her parents. Those who are accustomed to statistical inquiries will admit that this table is the only one of the kind in existence: but it has

another merit with respect to our present inquiry, as it indicates, on a limited scale, how far the ranks of prostitution are recruited from factory girls, in proportion to other classes. It will be seen that only eight out of the whole fifty proceeded from the factories, while the overwhelming proportion of twenty-nine out of the whole fifty have been in service. This result agrees with what we have reason to believe is common in other towns. Six out of the fifty lived with their friends or parents. The other denominations are too scanty to require any remark. One only comes from a silk warehouse, a situation which is usually considered one of the least friendly to female virtue in Manchester.

Manchester and
Salford.

Appendix
to Dr. Hawkins's
Reports.

No.	Age when admitted.	How long in an evil course of life.		Occupation.	Business of Parents.
		Yrs.	Mths.		
1	18	not known		In a factory - -	Tinman.
2	17	0	3	In service - -	Brush-maker.
3	19	1	2	Ditto - -	Broker.
4	26	5	6	Ditto - -	Skinner.
5	24	2	0	Ditto - -	Dealer in earthenware.
6	19	1	7	Ditto - -	Provision-dealer.
7	18	0	8	In a factory -	Bricklayer.
8	18	not known		Lived with her parents	Serjeant.
9	19	ditto		Lace-maker - -	Labourer.
10	23	ditto		In service - -	Not known.
11	17	0	4	Ditto - -	Farmer.
12	22	4	0	Ditto - -	Upholsterer.
13	26	not known		Lived with her friends	Clergyman.
14	26	ditto		In service - -	Not known.
15	25	ditto		Ditto - -	Brewer.
16	19	ditto		Ditto - -	Attorney.
17	15	2	4	In a factory -	Labourer.
18	23	0	1	Lived with her parents	Fishmonger.
19	30	not known		Book-binder - -	Not known.
20	32	ditto		House-keeper -	Woollendrapery.
21	16	0	4	In service	Book-keeper.
22	26	not known		Ditto - -	Mason.
23	19	ditto		Ditto - -	Calenderer.
24	15	1	2	In a factory -	Labourer.
25	14	0	8	Ditto - -	Ditto.
26	15	0	3	In service - -	Butler.
27	21	0	5	Ditto - -	Surveyor.
28	19	2	0	Ditto - -	Not known.
29	19	not known		Ditto - -	Ditto.
30	16	1	6	In a factory -	Butcher.
31	13	0	5	Seller of matches	Labourer.
32	18	1	3	In service -	Book-keeper.
33	18	not known		Ditto - -	House-steward.
34	19	ditto		Ditto - -	Not known.
35	18	5	6	In a factory -	Ditto.
36	13	0	4	In service - -	Ditto.
37	16	0	7	Ditto - -	Mason.
38	20	2	8	Ditto - -	Not known.
39	15	not known		In a factory -	Ditto.
40	17	ditto		In service. - -	Farmer.
41	16	0	5	Lived with friends	Not known.
42	13	0	7	In service -	Warehouseman.
43	17	not known		Lace-maker - -	Not known.
44	18	ditto		In service - -	Warehouseman.
45	14	0	1	Lived with parents	Not known.
46	18	not known		In service - -	Ditto.
47	19	1	2	Lived with parents	Schoolmaster.
48	17	not known		In service - -	Brushmaker.
49	16	ditto		In silk warehouse.	Gardener.
50	17	ditto		In a factory - -	Hatter.

SUICIDE; MANCHESTER.

Manchester and
Salford.

Appendix
to Dr. Hawkins's
Reports.

CORONER'S REPORT for the last Nine Months, in his District of 450,000 Souls.

5 Housewives.
1 Surgeon.
1 Maid-servant.
1 Soldier.
2 Beer-sellers.
1 Cotton-spinner.
1 Iron-founder.
1 Labourer.
1 Hawker.
3 Employed in agriculture.
1 Silk-winder.
1 Calico-printer.

STOCKPORT.

CHOLERA.

Stockport.

Appendix
to Dr. Hawkins's
Reports.

Mr. Flint writes to Dr. Gaultier, that it was observable during the prevalence of the pestilence at Stockport, that the working inmates of the mills enjoyed a remarkable immunity from attack; an immunity which (according to Mr. Flint) denotes the general comfort and cleanliness of those establishments. The patients, chiefly females, were nearly all employed about private dwellings.

CHOLERA in STOCKPORT.

(Population 25,469.)

First cases June 19th, July 3d, Aug. 12th. Last case October 15th. 1832.	Attacked.	Died.	Recovered.	Event unreported.
Imported cases -	2	2	—	—
Native - do. -	70	30	38	2
Total -	72	32	38	2

STOCKPORT DISPENSARY.

STATEMENT of PATIENTS extracted from the five last Annual Reports.

		* Out-patients.				† Home-patients.			
		Cured.	Relieved.	Dead.	†	Cured.	Relieved.	Dead.	†
Year ending March	1829 -	421	43	44	9	202	9	49	6
	1830 -	521	75	41	5	246	14	61	7
	1831 -	428	78	48	6	197	16	58	5
	1832 -	432	80	35	6	268	31	61	5
	1833 -	309	60	37	—	235	16	56	4

(continued)

		§ In-patients.			Accidents.		
		Cured.	Relieved.	Dead.	Cured.	Relieved.	Dead.
Year ending March	1829 -	65	—	9	127	—	3
	1830 -	27	—	7	152	—	5
	1831 -	17	—	16	120	1	7
	1832 -	17	—	29	85	1	6
	1833 -	28	—	15	95	1	5

* Come to Hospital.

† These columns include patients discharged, being incurable, irregular, or at their own request.

‡ Visited at home.

§ Fever and severe accidents.

|| Besides the number of accidents entered on the books as having been cured, relieved, or dead, a great number of slight cases of accident are cured or relieved without being recorded; this arises from the admission of all cases of accident without any recommendation from the subscribers. The serious accidents have been chiefly from builders falling from scaffolds; a much smaller number from injuries received from carts and coaches; several cases have occurred of severe and fatal burns and scalds; and during the above five years I recollect three or four cases of lives or limbs lost by serious accident from machinery in factories. Very slight cases of accident, from the finger ends of boys

(D. 3.)

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and

REPORT of the Year between March 1832 and March 1833.

Stockport.
Appendix
to Dr. Hawkins's
Reports.

Age of Patients.	Out-patients.		Home-patients.		Accidents.		Total.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Under 15 years -	135	71	65	66	135	71	335	208
15 to 19 - -	37	24	22	34	37	24	96	82
20 to 29 - -	51	17	46	74	51	17	148	108
30 to 39 - -	29	20	40	63	29	20	98	103
40 to 49 - -	26	11	39	58	26	11	91	80
50 to 59 - -	11	7	21	41	11	7	43	55
60 and upwards -	15	5	39	43	15	5	69	53
	304	155	272	379	304	155	880	689
	459		651		459		1,569	
Of which number came from factories (including weavers) - }	192 170		97 133		170 76		459 379	
	362		230		246		838	

It results from this table that more than half of all the patients admitted came from factories (including weavers).

Wilmslow.

WILMSLOW.

EXTRACT from the Sick Club Books of a Mill in the parish of Wilmslow, belonging to Samuel Greg and Co.

The number of workpeople, independent of apprentices, is about 300.

The average number receiving relief in 1831 - - 7 persons.

Do. - Do. - 1832 - - 6 —

Equal to 2.16 per Cent.

The number of deaths in the three years - - { 1830
1831 } 6 persons.
1832

Equal to 1 in 150 persons per annum.

The Club has been above 20 years in existence, and is supported by a deduction of half a farthing in the shilling from the wages of all the workpeople.

When sick they receive half wages for three months; and when a death occurs in a family they receive for the funeral,

For the head of a family - - - £8

For a woman - - - - - 5

For a child - - - - - 3

The allowance when sick formerly extended to six months, and those for funerals were greater, but, the fund becoming bankrupt, the payments have been reduced to the present scale, which does not seem too liberal for permanency.

Besides the 300 workpeople, 90 apprentices are employed in the same mill.

Amongst them in the last 22 years have occurred 17 deaths, including accidents, totally unconnected with their occupation in the mill.

and girls being caught and injured by the spinning rollers, frequently occur; two per week is the utmost that the chairman or the house surgeon can estimate.

Of the out-patients relieved, a large proportion are cases of hernia; though I have particularly attended to these cases (being expensive to the charity) I do not recollect a case occasioned by working in factories.

The proportion of males and females appears to me so equal that I cannot form even an opinion of the preponderance of either.

The proportion of disease from lodging-houses frequented by strangers, and especially by Irish, very far exceeds other causes of sickness. The class of persons employed in factories, compared with their number, forms a small proportion of the Dispensary patients; nor have I ever known an instance of any young person being maimed or injured in their person by punishment of any kind.

Seventeen

Seventeen deaths in 22 years amongst 90 persons, filling up the places of those who die, gives a result of about one death in 120 persons per annum.

Mr. Holland, the family physician, has attended these apprentices for 40 years, and he states in the attached certificate,—“After the lapse of a few weeks I have generally found the state of health improved;” and “what I here say has reference only to the first few months; but I have no hesitation in adding, that the general health of the children who are apprenticed and remain at the factory is at least as good, I believe I may say better than that of an equal number of children in the same rank of life.”

From the foregoing documents I think the inference a fair one, that there is nothing necessarily destructive of life or detrimental to health resulting from employment in a cotton-mill for 12 hours per day, and that most of the evils attributed to what is called the “factory system” are evils resulting from large towns and crowded population.

Norcliffe, Wilmslow, }
2d May 1833. }

ROBERT HYDE GREG.

This Certificate applies to the apprentices of the mill of Samuel Greg and Co., in the parish of Wilmslow.

For more than forty years I have attended in a medical capacity the apprenticed children at the cotton-spinning factory of Mr. Greg, situated on the banks of the Bollen in Cheshire, about two miles below Wilmslow.

The number of children received into the apprentices house, and living there at one time, has varied from 80 to 110. The average number has been about 90.

Of these, the proportion of girls to boys has usually been about two to one, or sixty girls to thirty boys.

None have ever been indentured under nine years of age, and scarcely any so young, at any time. From ten to twelve have been the most frequent ages.

On their being received into the house the practice has been for them to be initiated into their future occupation, and to be employed in the mill for a month or six weeks, occasionally longer, before they are submitted to my examination as to their general constitutions and present state of health.

A memorandum is at the time made of this, and such remarks as occur to me put down. After a lapse of a few weeks more a second examination is made; when I have generally found the state of health improved, and have very frequently had to recommend that many, whose constitutions I on a first examination considered far from strong, should be allowed to remain; and very few have been sent back, excepting those who have been affected with scrofulous disorders, or chronic complaints of the eyes.

I have said should “be allowed to remain;” for, almost without an exception, the children endeavour to give me the most favourable account of their health, are themselves most anxious to stay, and I have frequently had to witness their tears and distress when I have advised to the contrary.

This has been after having been employed for two or three months in the mill, on the average from eleven to twelve hours daily; and may, I conceive, be regarded as a sufficient proof that they are themselves satisfied with their change of situation and employment.

What I have said has reference only to the first few months; but I can have no hesitation in adding, that the general health of the children who are apprenticed and remain at the factory for several years is at least as good, I believe I may say better than that of an equal number of children in the same rank of life.

I have no memoranda of the deaths during the first twenty years of my professional attendance; but I find, that during the last twenty-two the number has been only seventeen; or, reckoning the apprentices at ninety, which has been about the average, 0.85 per 100.

Of these seventeen the deaths of at least three were owing to causes perfectly unconnected with the employment at the mill: one died of small-pox; a second by an accident in the mill-race, when not occupied at his work; a third, a healthy girl, from apoplexy, occasioned by overloading her stomach with raw unripe fruit.

We have then only fourteen deaths in twenty-two years which by any possibility can be attributed to causes connected with their employment; while the remainder have been so healthy that months have often elapsed without my having to prescribe for any one of them, though they have worked more than sixty hours per week.

Mr. Greg’s mill is in the country; but, exclusively of this, it affords no peculiar advantages in point of situation; on the contrary, it is at the bottom of a valley, with the grounds rising rather high on all sides. The house where the children are lodged and boarded is at the top of the hill, a quarter or a third of a mile distant. Most assuredly, all the children are well clothed, well fed, and comfortably lodged; and the question at once arises, whether this better food, clothing, and other comforts do not more than compensate for their extra labour.

I know nothing of other mills. It may be that Mr. Greg affords particular indulgences to the children; but I can truly say, that those employed by him appear to be most happy and contented in their situation; and the facts I have stated will show that they have at least an average share of good health. In addition to the attention paid to their health, I may add, that their moral and religious habits are equally made objects of attention, and that they are instructed in reading, writing, and the common rules of arithmetic.

Knutsford, 30th March 1833.

P. HOLLAND, Surgeon.

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Wilmslow.

Appendix
to Dr. Hawkins
Reports.

HINDS.

Hinds.
Appendix
to Dr. Hawkins's
Reports.

CHOLERA.

Not a single person was attacked with this pestilence in the cotton-mill at Hinds (according to Dr. Gaulter), although the disease raged in the hamlet.

Warrington.

WARRINGTON.

CHOLERA.

Mr. Glazebrook writes to Dr. Gaulter, from this place, that persons employed in the cotton-trade in their own dwellings, such as reelers, &c., suffered from this epidemic, but there were few, if any, cases from the cotton-mills.

Liverpool.

LIVERPOOL.*

BILLS OF MORTALITY.

From the Bills of Mortality which have just been published, it appears that there were in Liverpool, during the year 1831, Baptisms, males 4,043, females 3,824; total 7,867;—burials, males 2,583, females 2,459; total, 5,042;—marriages, 2,380; being an increase in baptisms, compared with last year, of 581; increase in burials 1,137; increase in marriages 160. The population of Liverpool in 1831 was 165,221, the vicinity 40,760; total 205,981. The following comparative table of the ages of the deceased gives evidence of the town's salubrity:—

Under 2 years	-	-	1,830	Between 50 and 60	-	-	273
Between 2 and 5	-	-	820	60 and 70	-	-	309
5 and 10	-	-	233	70 and 80	-	-	229
10 and 20	-	-	200	80 and 90	-	-	122
20 and 30	-	-	366	90 and 100	-	-	16
30 and 40	-	-	344				
40 and 50	-	-	300	Total			5,042

LIVERPOOL FRIENDLY SOCIETY.

This is a great Benefit Society, the members of which belong principally to the class of artisans, porters, &c.

The total number of subscribing members in the year 1829-1830 was 2,231.

MEDICAL AND SURGICAL REPORT OF THE SOCIETY.

Number of Sick on the Books on the				Indigestion	-	-	-	93
1st July 1829	-	-	50	Insanity	-	-	-	1
Cases occurring the past year, from				Inflammatory Fever	-	-	-	6
1st July 1829 to 30th June 1830—				Simple Fever	-	-	-	140
Abscess	-	-	4	Typhus Fever	-	-	-	17
Accidents	-	-	164	Inflammation of the Air Passages of the				
Asthma	-	-	7	Lungs	-	-	-	36
Apoplexy	-	-	3	Bowels	-	-	-	1
Boils	-	-	20	Eyes	-	-	-	20
Cholera Morbus	-	-	55	Kidney	-	-	-	5
Colds and Coughs	-	-	34	Liver	-	-	-	6
Colic	-	-	3	Lungs	-	-	-	35
(Painters)	-	-	1	Peritoneum	-	-	-	9
Consumption	-	-	18	Pleura	-	-	-	64
Delirium Tremens (a disease brought on				Stomach	-	-	-	1
by habitual drinking)	-	-	4	Itch	-	-	-	2
Deafness	-	-	1	Leprosy	-	-	-	2
Diarrhoea	-	-	11	Locked Jaw	-	-	-	1
Diabetes	-	-	1	Nervous Affections	-	-	-	22
Disease of Heart	-	-	8	Obstruction of the Bowels	-	-	-	10
Skin	-	-	18	Operations—				
Joints	-	-	7	For Fistula	-	-	-	2
Dislocations	-	-	5	Piles	-	-	-	1
Dropsy	-	-	2	Tapping one Testicle	-	-	-	1
Dysentery	-	-	9	Removing one Tumour	-	-	-	1
Epileptic Fits	-	-	5	three Fingers	-	-	-	2
Fistula	-	-	2	one Thumb	-	-	-	1
Fractures	-	-	10	Pain in Face and Tooth-ache	-	-	-	39
Gout	-	-	4	Piles	-	-	-	9
Incontinence of Urine	-	-	1	Quinsey	-	-	-	16

* The object of introducing these returns from Liverpool is to furnish some points of comparison between Liverpool and Manchester, two great cities in the same county, and placed near to each other, but cultivating different pursuits.

Rheumatism and Lumbago	-	-116
Scarlet Fever	-	- 1
Scrophula	-	- 1
Saint Anthony's Fire	-	- 8
Stricture	-	- 2
Swelled Testicle	-	- 4
Syphilis	-	- 3
Vertigo or Giddiness	-	- 30
Whitlow	-	- 14
Wounds	-	- 55
		1,224

The deaths which occurred under my care within the last twelve months were—

From Consumption	-	- 12
Diseased Liver	-	- 3
Disease of Heart	-	- 2
Asthma	-	- 1
		18

Of these men 366 were attended at their own homes, and 858 attended at my Surgery.

JOHN PARR,
9, Camden Street.

Liverpool.

Appendix
to Dr. Hawkins's
Reports.

The total number of subscribing members in the year 1830-1831 was 2,384.

MEDICAL AND SURGICAL REPORT OF THE SOCIETY.

Number of Sick on the Books on the			Nettle Rash	-	- 7
1st July 1830	-	- 60	Obstruction of the Bowels	-	- 1
Cases occurring during the year, from			Operations—		
1st July 1830 to 30th June 1831—			Cutting for Fistula	-	- 2
Abscess	-	- 12	Removing Piles	-	- 1
Accidents	-	-233	small Tumour	-	- 1
Aneurism of Aorta	-	- 1	Tapping a Testicle	-	- 1
Apoplexy	-	- 2	Palsy	-	- 2
Asthma	-	- 13	Piles	-	- 11
Bites of Dogs	-	- 7	Poisoning	-	- 1
Boils	-	- 4	Prolapsus Ani	-	- 1
Bronchitis	-	- 21	Quinsey	-	- 35
Burns	-	- 11	Retention of Urine	-	- 1
Carbuncle	-	- 8	Rheumatism, Lumbago, &c.	-	-112
Cholera Morbus	-	- 84	Ruptures	-	- 2
Colic	-	- 6	Scarlet Fever	-	- 1
Consumption	-	- 9	Scrophula	-	- 4
Coughs and Colds	-	- 42	Swelled Testicle	-	- 5
Deafness	-	- 5	Spitting of Blood	-	- 8
Delirium Tremens (a disease brought on			Sprains	-	- 9
by habitual drinking)	-	- 5	St. Anthony's Fire	-	- 19
Diabetes	-	- 1	Stricture	-	- 1
Diarrhœa	-	- 12	Syphilis	-	- 1
Disease of Heart	-	- 7	Tooth-ache and pain in the Face	-	- 20
Joints	-	- 12	and extracting Teeth	-	- 30
Skin	-	- 19	Tumour	-	- 1
Veins of the Legs	-	- 2	Typhus Fever (mild)	-	-171
Dropsy of the Legs	-	- 1	(putrid)	-	- 2
Testicle	-	- 1	Ulcerated Sore Throat	-	- 1
Dislocations	-	- 2	Ulcers	-	- 9
Dysentery	-	- 11	Vertigo or Giddiness	-	- 40
Epileptic Fits	-	- 5	Vomiting of Blood	-	- 1
Fistula	-	- 3	Whitlow	-	- 2
Fractures	-	- 13	Worms	-	- 3
Gonorrhœa	-	- 1	Wounds	-	- 6
Gout	-	- 7			1,415
Hæmorrhage (from an artery of chin)	-	- 1			
the nose	-	- 3			
Head-ache	-	- 1			
Indigestion	-	- 75			
with loss of sight in the after-					
noon	-	- 1			
Inflammation of the Bladder	-	- 1			
Bowels	-	- 9			
Dura Mater	-	- 1			
Eyes	-	- 19			
Kidney	-	- 3			
Liver	-	- 11			
Lungs	-	- 29			
Peritoneum	-	- 3			
Pleura	-	-104			
Spleen	-	- 1			
Itch	-	- 3			
Jaundice	-	- 2			
Leprosy	-	- 2			
Nervous Affections	-	- 4			

Deaths occurring under my care for the last twelve months—

Asthma	-	- 1
Bronchitis	-	- 1
Consumption	-	- 7
Pleurisy	-	- 1
Serous Apoplexy	-	- 2
Spitting of Blood	-	- 1
Typhus Fever (putrid)	-	- 2
		15

Of these patients 460 were attended upon at their own homes, and 955 at the Surgery.

JOHN PARR,
9, Camden Street.

ACCIDENTS, SUICIDES, CHILD MURDER, &c.

Liverpool.
Appendix
to Dr. Hawkins's
Reports.

Number of inquisitions taken before the Coroners of Liverpool between 1st June 1832 and 1st June 1833							197
Verdicts returned by the Jury were as follow:—							
Died from excessive drinking	-	-	-	-	-	-	11
Suicide, being at the time in a state of mental derangement	-	-	-	-	-	-	16
Accidental deaths	-	-	-	-	-	-	126
Died by the visitation of God	-	-	-	-	-	-	9
Found drowned	-	-	-	-	-	-	20
Child-murder	-	-	-	-	-	-	3
Manslaughter	-	-	-	-	-	-	8
No evidence how came to death	-	-	-	-	-	-	4
							197

NUMBER OF CASES of ACCIDENTS admitted into the LIVERPOOL INFIRMARY during the Year 1832.

Males	-	-	-	-	-	237
Females	-	-	-	-	-	53
Total						290 for 1832.

IN-PATIENTS with ACCIDENTS during 1831.

Males	-	-	-	-	-	292
Females	-	-	-	-	-	58
Total						350 for 1831.

INFIRMARY REPORT for 1831.

In-patients in the house 1st January 1831	-	-	-	-	-	220
Admitted since	-	-	-	-	-	1,960
						2,180
Discharged	{ Cured	-	-	-	-	1,107
	{ Relieved and at own request	-	-	-	-	232
	{ Made out-patients	-	-	-	-	375
	{ Irregular	-	-	-	-	126
Died	-	-	-	-	-	109
In-patients in the house 1st January 1832	-	-	-	-	-	231
						2,180
The weekly average of In-patients is						220

LUNATIC ASYLUM REPORT for 1831.

Number of Patients in the house }		59	DISCHARGED.					
1st January 1831	- - }		Cured	-	-	-	-	49
Admitted from 1st January 1831 }		93	Relieved		-	-	-	4
to 1st January 1832	- - }		Friends request		-		-	8
			Removed to county and settle-					23
			ments		-	-	-	
			Dead		-	-	-	9
							93	
			In the house this day		-	-	59	
		152					152	
Average weekly number in the house this year 55.								

REPORT of the LIVERPOOL DISPENSARIES.

MEDICAL DISEASES relieved in the year 1832.	South Dispensary, Upper Parliament Street.	North Dispensary, Vauxhall Road.	SURGICAL DISEASES relieved in the year 1832.	South Dispensary.	North Dispensary.
Abortions - - -	23	61	Aneurisms - - -	2	6
Agues - - -	17	47	Bruises and Sprains -	724	1,157
Apoplexy and Palsy -	33	67	Burns and Scalds -	484	206
Asthma - - -	210	273	Cancers - - -	9	9
Blood, Discharges of -	115	184	Concussions - - -	11	3
Bowel Complaints, severe -	1,431	1,144	Diseases of the Bones -	13	13
Do. Do. slight -	1,024	1,547	Do. Eyes - - -	97	127
Cholera Morbus - - -	373	932	Do. Ears - - -	13	14
Do. Do. slight -	433	—	Do. Glands - - -	65	75
Cholic - - -	70	241	Do. Joints - - -	53	66
Convulsive Diseases -	94	166	Do. Mouth - - -	72	—
Coughs and Colds -	830	1,352	Do. Nose - - -	13	4
Croup - - -	21	23	Do. Oesophagus - -	5	—
Dentition - - -	304	394	Do. Skin - - -	245	478
Dropsy - - -	96	160	Do. Teeth - - -	445	2,537
Drowning, Cases of -	17	10	Do. Throat - - -	187	88
Erysipelas - - -	63	68	Do. Urinary Passages	43	30
Female Diseases - - -	406	591	Do. Uterus - - -	25	56
Fevers - - -	1,040	1,991	Distortions - - -	27	17
Gout - - -	3	—	Dislocations - - -	47	31
Headache and Giddiness -	496	799	Fractures - - -	115	199
Heart, Diseases of the -	23	24	Head, Injuries of the -	76	18
Hooping Cough - - -	140	75	Inflammation and its con- sequences - - -	763	530
Indigestion - - -	1,010	1,550	Locked Jaw - - -	2	1
Inflammation of the Bowels	173	65	Mercurial Diseases -	13	—
Do. Brain - - -	23	3	Ruptures - - -	195	140
Do. Ear - - -	—	11	Scrofula - - -	56	36
Do. Eye - - -	33	82	Strangulated Hernia -	15	14
Do. Kidneys - - -	7	11	Tumours and Excrescences	185	109
Do. Lungs and Pleura	835	732	Vaccinations - - -	40	150
Do. Stomach - - -	115	42	Venereal Diseases -	373	755
Do. Spleen - - -	4	5	Wounds and Ulcers -	958	805
Do. Throat and Mouth	223	298	LIST OF OPERATIONS.		
Do. Uterus - - -	15	4	Amputations - - -	13	1
Insanity - - -	7	63	Cancer Scroti - - -	—	4
Intoxication - - -	47	36	Fistula - - -	7	6
Jaundice - - -	73	28	Hare Lip - - -	1	3
Liver, Diseases of the -	155	194	Hydrocele, &c. - -	13	8
Measles - - -	128	247	Strangulated Hernia -	1	1
Mercurial Diseases -	—	4	Total -		
Poisoning, cases of -	15	8		5,406	7,699
Palpitation - - -	—	8			
Pulmonary Consumption -	132	220			
Rheumatism - - -	893	1,198			
Scarlet Fever - - -	187	62			
Scrofula - - -	74	35			
Skin, Diseases of the -	339	799			
Small Pox - - -	180	68			
Spina Bifida - - -	4	—			
Tic Doloieux - - -	7	16			
Urinary Organs, Diseases of the - - -	53	62			
Venereal Diseases -	48	197			
Wasting of the Body -	165	74			
Water in the Head -	19	18			
Worms - - -	370	618			
Total -	12,606	16,907			

Liverpool.
Appendix
to Dr. Hawkins's
Reports.

ABSTRACT.

	South.	North.	Total.
Total Surgical Cases - - -	5,406	7,699	13,105
Total Medical Cases - - -	12,606	16,907	29,513
Improper Applicants dismissed - -	387	562	949
Received Advice and Medicine at the Institution	12,167	18,069	30,236
Visited at their own Dwellings, and supplied with Medicines - - -	5,845	6,537	12,382

Total Number of Cases relieved at the Two Dispensaries 42,618

(D. 3.)

Q q 4

MISCELLANEOUS INFORMATION relative to the FACTORY COMMISSION, in the BOROUGH of PRESTON, 1st June 1833.

Preston.

Number of paupers in the Poorhouse on the day of the return being made out - 266

How many of them have ever been employed in factories - - - 25

RICHARD WALTON, Overseer.

Appendix
to Dr. Hawkins's
Reports.

Number of accidental deaths arising from injuries in factories during the last } None.
two years; viz. from 1st June 1831 to 1st June 1833 - - - }

Number of accidental deaths arising from injuries not in factories, during the } 39
same period - - - - - }

(Report from the Town Clerk.)

Number of licensed public houses - - - - - 204

Number of licensed beer shops - - - - - 244

Number of licensed gin shops - - - - - 205

(Report from the Collector of Excise.)

BOLTON.

Bolton.

SICK SOCIETY.

The Bolton Parish Church Sunday School Sick Society, established in 1816, consists of about 580 members, who subscribe 1*d.* each per week, and receive an allowance of 2*s.* to 4*s.* per week during sickness, or until the amount paid has reached the sum of 7*l.* 6*s.*; but where the member is an orphan the relief is continued at the discretion of the officers, if they are in possession of funds amounting to 500*l.* or upwards: there is also an allowance of something more than 2*l.* for funeral expences, on the decease of a member.

Previously to the year 1830 no account was taken of the trades or occupations of the members; but during the three past years they have been classified, and out of an average of 577 members there have been 281, or nearly one half of them, from the factories, and 295 from the various other trades of the town. The sum of 435*l.* 11*s.* has in that period been expended in the relief during sickness of 455, and in the funeral expences of thirty members. Of those relieved, only 123, or a proportion of little more than one fourth, and of the deaths, only six, or one fifth of the number, were from the class of persons engaged in the factories.

The balance in the hands of the treasurer at the close of last year was 59*l.* 18*s.*

Bolton, 16th May 1833.

(Signed) JOHN WALSH, Secretary.

BAKEWELL.

Bakewell.

Bronchocele is a very common disease at Bakewell, Matlock, and in Crsebrook Dale. I saw numerous examples of it amongst the factory children of those places. It is far more common among the women than the men.

DISPENSARY and LYING-IN INSTITUTION.

MEDICAL REPORT from 5th January 1829 to the 2d January 1830.

Patients who were admitted on the Books of the Dispensary Department, during the above period,

229

Cured	-	-	-	-	-	-	146
Relieved	-	-	-	-	-	-	27
Dead	-	-	-	-	-	-	12
Vaccinated	-	-	-	-	-	-	2
Irregular	-	-	-	-	-	-	
Remain on the Books, (of which number nine are inhabitants of Bakewell, and 24 of the neighbouring townships,)	-	-	-	-	-	-	33
							229
Admitted on the Books of the Lying-in Department, all of whom have done well and been discharged	-	-	-	-	-	-	11
Total	-	-	-	-	-	-	240

MEDICAL REPORT from the 1st of January to the 31st of December 1831.

Bakewell.
Appendix
to Dr. Hawkins's
Reports.

Patients who were admitted on the Books of the Dispensary Department during the above period, 323.

Cured	-	-	-	-	-	-	-	220
Relieved	-	-	-	-	-	-	-	36
Dead	-	-	-	-	-	-	-	5
Vaccinated	-	-	-	-	-	-	-	26
Non-attendance	-	-	-	-	-	-	-	5
Remain upon the Books	-	-	-	-	-	-	-	31
								<u>323</u>

LYING-IN DEPARTMENT.

Admitted	-	-	-	-	-	-	38
Safely accouched and discharged	-	-	-	-	-	-	33
Remain on the Books	-	-	-	-	-	-	5
							<u>38</u>
Total	-	-	-	-	-	-	<u>361</u>

Of which number 152 were inhabitants of Bakewell, and 209 of the neighbouring townships. Visits made in Bakewell, 216. In the neighbouring townships, 55.

DERBY.

Derby.

The total population of Derby, according to the last census of 1831, is 23,607.

POPULATION of the FACTORIES at DERBY and BELPER.

(This List includes, I believe, every Mill,—on the authority of the Mayor.)

	Number employed.
Mr. Peel's, Derby	136
Mr. Hackett, Do.	72
Mr. Lowe, Do.	177
Mr. Hosters, Do.	39
Messrs. Thomas Bridgett and Co., Morledge	153
Ditto, Bridge Street	411
Messrs. Wright and Baker, Derby	176
Messrs. Moore and Co., Do.	280
Mr. Ward, Do.	44
Mr. John Baker, Willow Row	18
Mr. Ryley, Kensington	82
Messrs. J. and J. Robinson, Derby	45
Messrs. Stevenson and Frost	149
Mr. John Wright, Derby	22
Messrs. Wilson and Moore, Do.	50
Mr. Adcock, Do.	38
Mr. William Dallison, Devonshire-street, Do.	9
Mr. William Brown, Car-street, Do.	42
Mr. Unsworth, Siddals Lane, Do.	28
Mr. William Taylor, Full-street, Do.	327
Messrs. Boden and Morley, Derby	118
Mr. William Booth	118
Mr. Johnson, Albion-street	51
Messrs. Strutts, Belper	2,000
	<u>4,585</u>

REPORT of the Coroner for the Borough of Derby on the fatal Accidents, Child-murders, and Suicides, in the Year 1832.

Derby.
Appendix
to Dr. Hawkins's
Reports.

When taken.		Verdict.
26th Jan. 1832	Inquisition on the body of Alfred Moore, aged eight years	Burned.
1st Feb. 1832	Inquisition on the body of an infant male child	Found dead.
20th March 1832	Inquisition on the body of Jane Brown the younger, found hanged	Lunacy.
30th March 1832	Inquisition on the body of Phoebe Siderfin, aged four months	Found dead.
19th April 1832	Inquisition on the body of Thomas Clarke of Derby, Maltster, who hung himself	Lunacy.
2d June 1832	Inquisition on the body of Ellen, the wife of Thomas Coxon	Apoplexy.
23d July 1832	Inquisition on the body of James Hind, a twist hand, aged eighteen years	Killed by Machinery.
31st July 1832	Inquisition on the body of Henry Simms	Drowned.
2d August 1832	Inquisition on the body of William Evans, aged eight years	Killed by a Cart.
28th Sept. 1832	Inquisition on the body of Cornelia Rowley, aged four years	Burned.
12th Dec. 1832	Inquisition on the body of William Bates, aged three years	Burned.
13th Dec. 1832	Inquisition on the body of Joseph Cholerton, aged five years	Burned.
22d Dec. 1832	Inquisition on the body of Mary Watkinson, aged four years	Burned.

CHOLERA.

The total number of cholera cases which occurred in this borough was thirty-two, of whom fourteen died and eighteen recovered. The reports of the medical men do not give the occupations of the parties ; but, with the exception of two cases, they were all persons of the lower order.

GENERAL ACCOUNT of PATIENTS ADMITTED and DISCHARGED, from 29th September 1831 to 29th September 1832.

ADMITTED.	In.	Out.	Total.	DISCHARGED.	In.	Out.	Total.
On the Books, September 29th, 1831	69	194	263	Cured	282	332	614
Admitted since	610	529	1,130	Relieved	87	112	199
				Made out-patients	155	—	155
				At their own request	25	—	25
				For irregularity	15	—	15
Of this number 40 were cases of fever, 56 In-patients, and 11 cases of emergency.				Dead	32	—	32
				Incurable	19	—	19
				For non-attendance, most of whom recovered	—	43	43
				Made in-patients	—	25	25
Average number of In-patients, 72.				On the Books, September 29th, 1832	55	211	266
	670	723	1,393		670	723	1,393

Total number of patients admitted since the opening of the Infirmary, 4th June 1810, 23,606.—Ditto discharged since ditto, 23,343.
Of this number the factories furnished, of the out-patients, 118, of the in-patients, 109.
The factory classes contributed, accordingly, about one fifth of the whole number ; above one fifth of the out-patients, and above one fourth of the in-patients.

Derby.
Appendix
to Dr. Hawkins's
Reports.

REPORT of the DERBY SELF-SUPPORTING CHARITABLE and PAROCHIAL DISPENSARY,
for the Year 1832.

Patients attended in the Year 1832:

Cases from the Free Class	-	796	Relieved	-	-	-	241
Cases from the Charity Class		638	Midwifery cases	-	-	-	23
		—1,434	Inoculated for cow-pock				135
Cured	-	-	Deaths	-	-	-	45
		1,037					

Patients now on the Books:

Free Patients	-	-	-	47		Charity Patients	-	-	64
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The apothecary informs me, that about two thirds of the patients come from the factories. They visit the sick as far as Darley, about a mile from Derby, where a large factory exists.

LADIES CHARITY for the Relief of poor Married Women in Childbed.

This charity is principally devoted to affording linen to poor lying-in women, and to assisting them with a portion of the expence of the midwife's attendance. The total number of women who had the benefit of the linen during the year between December 1831 and December 1832 was 220. Many of these women are employed in factories. I was desirous of obtaining an exact account of the mortality, but I am only able to report from the memory of Mrs. Borrow, the matron of the charity, who affirms that the number of deaths in childbed amongst the above 220 was four, or one in fifty-five. On the other hand, Mrs. Marshall, who is probably the first midwife in Derby, and who annually delivers between 200 and 300 females, amongst whom are many factory women, affirms most positively, that she has never lost a single patient in childbed during the last ten years. She confirms, in other respects, the evidence delivered by the two midwives at Manchester respecting the comparative frequency of miscarriages amongst factory women, their inferiority in fulness of form to other women, and their frequent destitution of the most common comforts of the sick, such as fire, candles, tea, gruel. She believes that the factory wives also acquire the appearance of old age more early than women in other classes.

DERBY FEMALE FRIENDLY SOCIETY.

		Number of Members.	Annuityants.	Other Members.	Average weekly sickness.
From June	1830 to 1831	- 83	22	61	3 ⁹ / ₁₀
	1831 to 1832	- 76	24	52	2
	1832 to 1833	- 71	24	47	2 ⁸ / ₁₀
Average of the last three years		- -	- -	53 ¹ / ₃	2 ⁹ / ₁₀

The annuityants are upwards of sixty-five years old, and do not receive pay in sickness unless in very extreme cases, of which only one has occurred, and not above one fourth are employed in factories. Of the younger numbers I believe a majority of them are employed in factories.

13th June 1833. J. THOS. SWANWICK,
Hon. Secretary.

BELPER, &c.

Belper, &c.

Not one case of cholera has occurred in the parish of Duffield, which includes the cotton-mills of Belper and Milford, in which 2,000 workpeople are employed. One man who died of cholera at Morley (seven miles from Belper) is buried in the burying-ground of the Methodists at Belper, because there is no Methodists burying-ground at Morley. In the weekly list of paupers at Belper are at present to be found eleven able-bodied men, with large families, of whom eight are nail-makers and three are stocking-makers; but there is not at present one head of a family engaged in factories, or who has ever been engaged in factories, who now receives parochial support. One individual who formerly worked at a factory is, indeed, lodged in the workhouse, but he pays for his own maintenance. There are at present fifteen women in Belper whose bastards are on the parochial list: seven of those children are supported by the fathers to whom they have been sworn, and the remaining eight are maintained at the expence of the parish. Only four out of these fifteen women belong to factories; three are servants, and three are lace-runners. This information was communicated to me by Mr. Pym, the overseer of the parish of Duffield, which includes the township of Belper.

POPULATION and DEATHS in the Parish of DUFFIELD in the County of DERBY for the last Twenty Years, from January 1813 to January 1833.

Belper, &c.
Appendix
to Dr. Hawkins's
Reports.

Age.	Deaths in 20 Years.	per Annum.	Average Population for 20 Years.	Per Centum of Deaths for different Ages.
Under 9 years of age -	1,927	96.35	3,923	2.45 or 1 in 41.
From 9 — to 60 -	1,736	86.80	9,027	0.96 or 1 in 104.
— 60 — to 80 -	728	36.40	687	5.30 or 1 in 19.
— 80 — to 100	281	14.05	55	25.54 or 1 in 3.91.
Deduct burials from } other Parishes - }	4,672	233.60	13,692	1.7 or 1 in 58.8.
	70	—	—	—
	4,602	230.1	13,692	1 in 59.5.

The parish of Duffield is a very large one, consisting of the following townships and hamlets. The burials are taken from the registers of the churches of Duffield and Belper, and from the registers of the chapel belonging to the methodists, independents, unitarians, and baptists, being the only places of burial in the parish of Duffield.

The population, taking the average for the last twenty years, is as follows :—

Duffield and Maheny	-	-	-	-	2,725
Belper	-	-	-	-	7,000
Heage	-	-	-	-	1,844
Turnditch	-	-	-	-	370
Shottle	-	-	-	-	556
Haylewood	-	-	-	-	290
Holbrooke	-	-	-	-	703
Wendley	-	-	-	-	204
					13,692

10th June 1833.

JED. STRUTT.

From 1821 to 1827 inclusive (seven years) there was a sick club for the females employed at the cotton-works at Belper, consisting on the average of 432 members. This sick club was an excellent institution, provided it had not met with the abuse to which all sick clubs are liable, and which caused its dissolution, so far as receiving weekly pay, in the year 1828. A few of the members, who certainly were not in strong health, but yet were very capable of work, preferred receiving the pay from the club, and remaining at home, rather than come to work ; this became so palpable, that, after every remonstrance, the club, finding themselves still imposed upon, felt the necessity of giving it up. Medical advice is still, however, retained for all females employed at Belper mills.

JED. STRUTT.

Year.	Number of Members.	Number of Deaths.	Names of those who died.	
1821 - -	466	1	1821 Ann Hull.	1825 M. Walker.
1822 - -	440	2	1822 E. Walker.	M. Walker jun.
1823 - - -	455	3	Anne Booth.	Sarah Gratian.
1824 - - -	460	2	1823 Lucy Harrison.	1826 Sarah Mills.
1825 - - -	412	5	Sarah Harrison.	Mary Bowler.
1826 - - -	390	4	Susannah Glud.	Sarah Green.
1827 - - -	400	3	1824 Martha Gregory.	Mary Martin.
Average for } seven years - }	3,023	20	E. Pedley.	1827 Martha Cooper.
	432	2.85 or	1825 E. Cumm.	Ann Hunt.
		1 in 151.5	M. Davis.	Ann Ratcliffe.

Every member of this club has continued on the books for twelve months after being on the sick list. This fact is mentioned because in some sick clubs the members names are taken off three months after their sickness.

Belper, &c.

Appendix
to Dr. Hawkins's
Reports.

I hereby certify, that during the last twelve months I have attended 167 cases of typhus fever in Belper and its vicinity, out of which number —

55	were nailers, the population of nailers probably consisting of about 800, equal to 1 in 15.		
28	— cotton-mill people,	ditto	2,000, — 1 in 73.
18	— stone-bottle-makers,	ditto	160, — 1 in 9.
10	— stockingers,	ditto	200, — 1 in 20.
56	— children, servants, farmers, &c.		

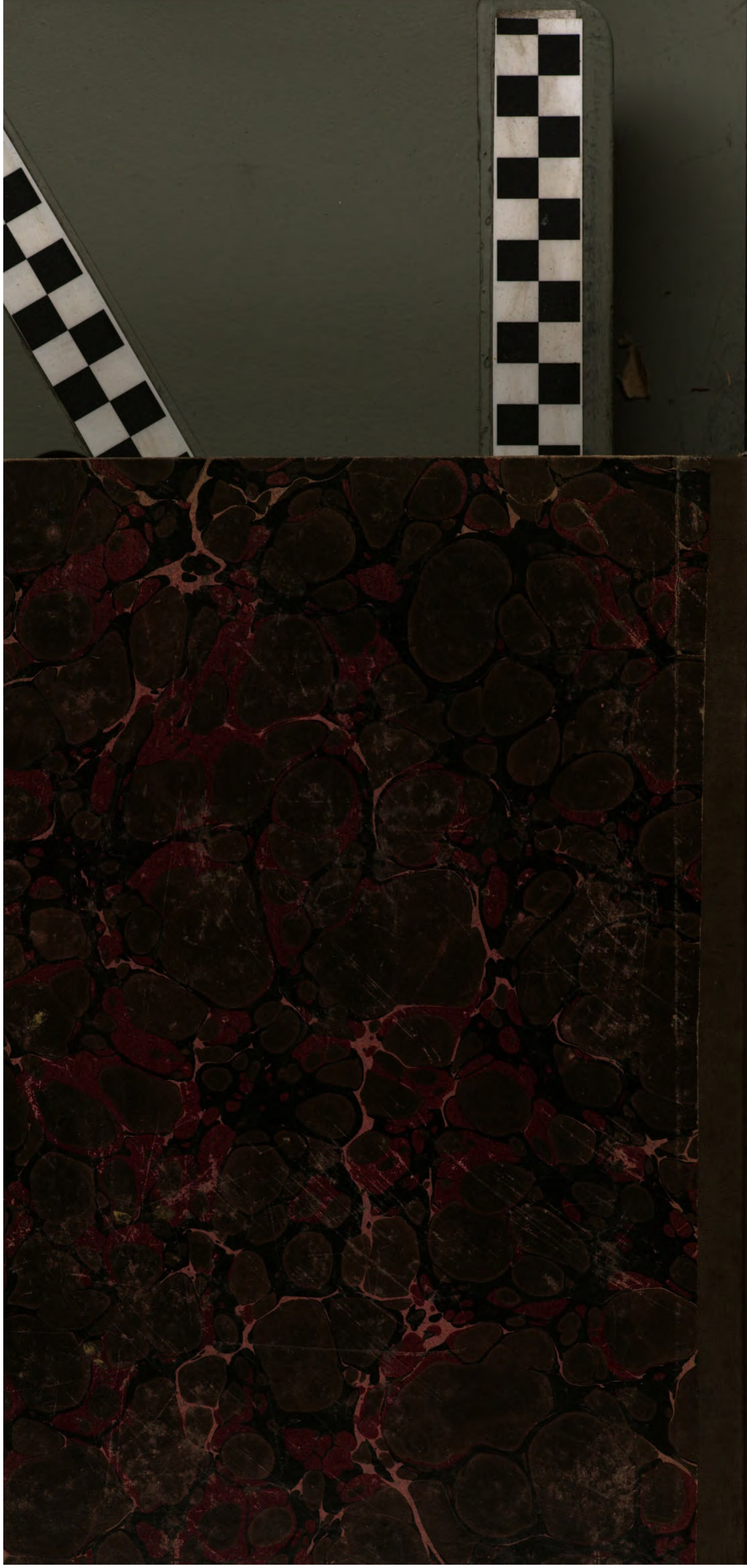
I also certify, that out of 174 cases of sick paupers, which I attended in the year ending 25th March 1818, thirty-two only worked at the cotton-mill.

Belper, 1st June 1818.

D. EVANS, Surgeon.

Sworn before me, an acting magistrate for the }
county of Derby, on the 1st of June, } J. BALGAY.

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Factories Inquiry Commission Supplementary Report of the Central Board of
H. Maj. Commissioners appointed to collect Information in the
Manufacturing Districts, as to the Employment of Children in Factories,
and as to the Propriety and Means of Curtailing the Hours of their Labour;
Bd.: 1

[London] (1834)

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